



NATIONAL LIBRARY OF MEDICINE

Bethesda, Maryland

30-41
Accident

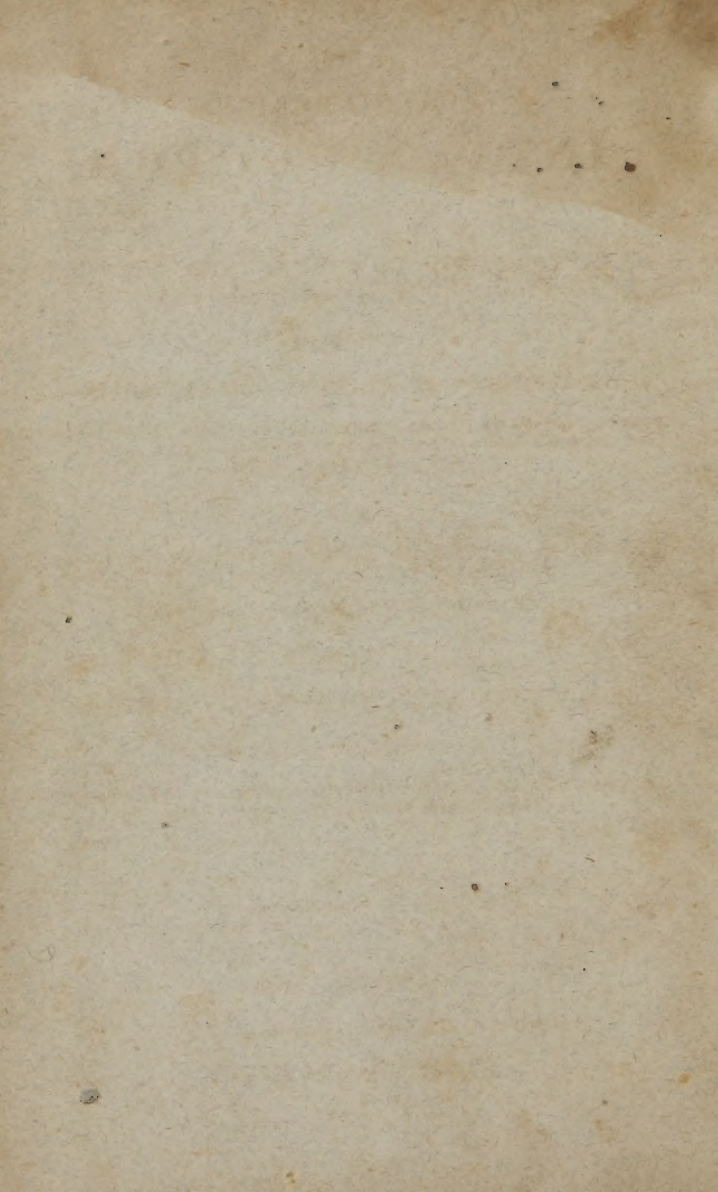
25⁰⁰

from Mrs Wm Young

to Dr Eggs.

Handwritten text, likely bleed-through from the reverse side of the page. The text is written in a cursive script and is difficult to decipher due to fading and the angle of the page. It appears to be a list or a series of entries, possibly related to a collection or inventory.





THE
NORTH AMERICAN
INDIAN DOCTOR,

OR

NATURE'S METHOD OF CURING AND PREVENTING
DISEASE ACCORDING TO THE INDIANS;

CONTAINING

A CATECHISM OF ANATOMY AND PHYSIOLOGY

OF BETWEEN FIVE AND SIX HUNDRED QUESTIONS, WITH THEIR CORRECT ANSWERS, SELECTED
FROM THE BEST AUTHORS IN THE WORLD, FOR NEW BEGINNERS, OR THOSE WHO WISH
TO STUDY THE SCIENCE OF ANATOMY.

ALSO,

A TREATISE ON MIDWIFERY,

WITH THE TREATMENT NECESSARY DURING PREGNANCY.

ALSO,

A MATERIA MEDICA OF INDIAN REMEDIES,

OR VEGETABLE COMPOUNDS,

IN THE FORM OF RECIPES FOR MORE THAN TWO HUNDRED AND FIFTY DISEASES, WITH A
DESCRIPTION OF SUCH PLANTS AS ARE NOT COMMON.

BY ROBERT D. FOSTER,
BOTANIC PHYSICIAN.

CANTON, OHIO:

PRINTED FOR THE AUTHOR,

BY SMITH AND BEVIN.

1838.

THE NEW YORK

LIBRARY DOCTOR

COPY RIGHT SECURED ACCORDING TO LAW.

EXAMINATIONS

IN

ANATOMY, PHYSIOLOGY, MIDWIFERY, AND MATERIA MEDICA.

For the Instruction of Students.

ANATOMY.

1. Question. WHAT are the divisions of the science of Anatomy?

Answer. The science of Anatomy is divided into Osteology, Syndesmology, Myology, Bursalogy, Angiology, Neurology, Adenology, Splanchnology, and Hygrology.

2. Q. What are the solids of the body?

A. The solids of the body are the bones, cartilages, ligaments, muscles, cellular substance, membranes, vessels, nerves, glands, viscera, and adipose substance.

3. Q. How do anatomists divide the skeleton?

A. The human skeleton is divided into head, trunk, and extremities. The head is subdivided into cranium, or skull, and face. The upper extremities into brachium, antibrachium, carpus, metacarpus, and phalanges. The lower extremities into femur, crus, tarsus, metatarsus, and phalanges. The trunk is subdivided into spine, thorax, and pelvis.

4. Q. How many bones compose the cranium?

A. Eight; namely, one os frontis, two ossa parietalia, one os occipitis, two ossa temporalia, one os ethmoides, and the os sphenoides.

5. Q. What are the sutures of the cranium?

A. The sutures of the cranium are five in number, viz. the coronal, the sagittal, the lambdoidal, and the two squamous.

6. Q. What are the peculiarities of the frontal bone in the fœtus?

A. The frontal bone in the fœtus is divided down the middle; it contains no sinuses; and neither the orbital plates nor superciliary ridges are completely formed.

7. Q. Where is the os frontis situated?

A. The os frontis is situated in the anterior part of the cranium, and superior part of the face.

8. Q. Where is the lachrymal depression situated?

A. The lachrymal depression is situated on the orbital plate, and behind the external angular process.

9. Q. Describe the parietal bones.

A. The parietal bones are of a quadrangular shape, are externally convex, internally concave, and marked with grooves for the meningeal arteries. They form the lateral and superior part of the cranium.

10. Q. Describe the situation of the sphenoidal bone.

A. The sphenoidal bone is situated in the middle of the basis of the cranium, extending underneath, from one temple across to the other.

11. Q. Into how many portions is the temporal bone distinguished?

A. Generally into two portions, viz. a squamous portion and a petrous portion.

12. Q. In what bone is the organ of hearing situated?

A. In the petrous portion of the temporal bone.

13. Q. How many tables have the bones of the cranium?

A. Two: an external and an internal.

14. Q. What is the name of the substance which unites the two tables of the cranium?

A. It is called diploe, and medietullium.

15. Q. What is attached to the internal angular process of the frontal bone?

A. There are two muscles attached to the internal angular process: viz. the corrugator supercilii and the trochlearis, or obliquus superior.

16. Q. What is the union of the bones of the skull termed?

A. Suture.

17. Q. What is the name of the suture which connects the frontal with the parietal bones?

A. The coronal suture.

18. Q. By what suture is the occipital bone united to the parietal bones?

A. By the lambdoidal suture.

19. Q. What name is given to the suture which connects the parietal bones?

A. It is called the sagittal suture.

20. Q. Describe the occipital bone.

A. The occipital bone forms the posterior and inferior part of the skull, is of an irregular figure, externally convex, internally concave. It has many depressions and elevations, and is connected, at its inferior part, by means of a projection, called the basilar process, to the sphenoid bone.

21. Q. Describe the sphenoid bone:

A. The sphenoid bone is divided into a body and wings. It has many processes, depressions, and foramina, and is connected to all the bones of the cranium.

22. Q. What are the processes of the sphenoid bone?

A. The principal processes of this bone are, the two pterygoid processes, the styliform process, the spinous processes, the orbital processes, the temporal processes, the ethmoidal process, the olivary process, and the anterior and posterior clinoid processes.

23. Q. What bones are united by the false sutures?

A. The temporal bones are united to the parietal bones by the false or squamous suture.

24. Q. Through what foramina do the olfactory nerves pass out of the cranium?

A. Through the foramina cribrosa, which are in the upper part of the ethmoid bone.

25. Q. Where is the foramen magnum occipitale situated?

A. In the occipital bone, at the inferior part between the condyles and behind the basilar process.

26. Q. To what bone does the crista galli belong?

A. To the ethmoid bone: it forms the projecting process within the cranium, to which the falciform process of the dura mater is attached.

27. Q. To what bone does the sella turcica belong?

A. To the sphenoid bone: it is placed in the middle; and projects into the cavity of the cranium.

28. Q. What does the foramen rotundum of the sphenoid bone transmit?

A. The foramen rotundum transmits the second branch of the fifth pair of nerves.

29. Q. Describe the frontal bone.

A. The frontal bone has some resemblance to a cockleshell: it is placed in the anterior part of the skull, and forms the forehead and upper part of the orbits. It receives the anterior lobus cerebri, forms a notch for the ethmoid bone, is externally convex, internally concave, and has several elevations and depressions.

30. Q. Where is the os ethmoidale situated?

A. The os ethmoidale is situated at the root of the nose, in a notch between the orbital plates of the frontal bone.

31. Q. What bone separates the ethmoid from the occipital bone?

A. The os sphenoidale.

32. Q. Through what foramen does the third branch of the fifth pair of nerves pass?

A. The third branch of the fifth pair of nerves goes through the foramen ovale.

33. Q. At what angle of the parietal bone is the groove for the spinous artery?

A. The spinous artery of the dura mater runs in a groove at the anterior inferior angle of the parietal bone.

34. Q. What rests on the internal surface of the cuneiform process of the occipital bone?

A. The medulla oblongata rests upon the inner surface of the cuneiform or basilar process.

35. Q. What is attached to the lateral parts of the internal crucial spine of the occipital bone?

A. The tentorium, which separates the cerebrum from the cerebellum.

36. Q. In what bone is the foramen opticum?

A. The foramen opticum is in the sphenoid bone.

37. Q. Where is the foramen opticum found in the skull?

A. In the orbit, at the very bottom.

38. Q. What is the use of the foramen opticum?

A. It transmits the optic nerve to the eye.

39. Q. What are the eminences of the temporal bone?

A. The principal eminences are the mastoid process, the zygomatic process, the styloid process, vaginal process, and the ridge on the petrous portion.

40. Q. What is the use of the meatus auditorius internus?

A. The meatus auditorius internus transmits the portio dura and portio mollis.

41. Q. To what nerve does the fissura Glasseri give exit?

A. The chorda tympani.

42. Q. What is the name of the suture that connects the bones of the face to those of the cranium?

A. The bones of the cranium are connected to those of the face by means of the transverse suture.

43. Q. How many bones compose the face?

A. The face is formed by fourteen bones; two superior maxillary, two nasal, two palatine, two jugal, two inferior spongy, two lachrymal, the vomer, and the inferior maxillary bone.

44. Q. What is attached to the styloid process of the temporal bone?

A. Three muscles, viz. the stylo-pharyngeus, the stylo-glossus, and the stylo-hyoideus; also the ligament of the os hyoides, and the lateral ligament of the lower jaw.

45. Q. Enumerate the principal elevations of the occipital bone?

A. The principal elevations of the occipital bone are, its condyles, a longitudinal ridge, a superior and an inferior transverse ridge, a tuberosity in the centre of the superior transverse ridge; these are on the external surface. On the internal surface is seen the crucial spine.

46. Q. To what bone does the mastoid process belong?

A. It is a part of the temporal bone.

47. Q. How many bones compose the orbit?

A. Seven: viz. os frontis, os ethmoides, os sphenoides, os lachrymale, os jugale, os palati, and the os maxillare superius.

48. Q. What passes through the foramen lacerum orbitale superius?

A. The third, the fourth, the first branch of the fifth and sixth pair of nerves.

49. Q. How many bones compose the lower jaw?

A. One, in the adult, the inferior maxillary bone.

50. Q. What bones form the septum narium?

A. The azygos process of the ethmoid bone, and the vomer.

51. Q. To what bone do the superior turbinated bones, as they are called, belong?

A. To the ethmoid bone, of which they are a part.

52. Q. In what bone is the antrum of Highmore situated?

A. In the superior maxillary bone, behind the cheeks.

53. Q. Is the body of the sphenoid bone hollow or solid?

A. Hollow: it contains the sphenoidal sinuses, which communicate with the nose.

54. Q. What separates the antrum of Highmore from the orbit?

A. The orbital plate of the superior maxillary bone.

55. Q. Is there any communication between the orbit and the nostril?

A. Yes: by the ductus ad nasum, to convey the tears into the nose.

56. Q. How many bones are there in the tympanum?

A. Four: the incus, stapes, malleus, and os orbiculare.

57. Q. To what bone of the cranium does the styloid process belong?

A. To the temporal bone.

58. Q. What are the foramina of the superior maxillary bone?

A. The foramina of this bone are, the infra-orbital foramen, the foramen incisivum, the speno-maxillary fissure, and the foramen of the antrum maxillare.

59. Q. What bones form the foramen lacerum in basi cranii?

A. The temporal and occipital bones.

60. Q. What passes through the canalis carotideus?

A. The canalis carotideus transmits the carotid artery and the intercostal nerve.

61. Q. What are the processes of the sphenoid bone called, which form the sides of the posterior nostril?

A. The pterygoid processes.

62. Q. What passes through the foramen lacerum in basi cranii?

A. The jugular vein, par vagum, glosso-pharyngeal nerve, and nervus accessorius.

63. Q. Do the ossa palati form any part of the orbit?

A. Yes: a portion of the palate bone rises into the inferior part of it.

64. Q. Where is the vomer situated ?

A. In the centre of the nostrils, having the sphenoid and ethmoid bones at its upper part, the superior maxillary and palatine bones at its lower part, and the cartilaginous septum of the nose on the anterior part.

65. Q. Where is the Eustachian tube situated ?

A. It passes from the tympanum of the ear obliquely forwards and inwards, and opens in the fauces, near the posterior nostril.

66. Q. How many foramina has the inferior maxillary bone ?

A. It has only two, which belong to the canalis mentalis: one placed externally and anteriorly, the other placed posteriorly and internally.

67. Q. Point out the situation of the zygomatic process on the face.

A. It forms the lateral and superior part of the cheek, extending anteriorly from the extremity of the ear.

68. Q. Where is the os unguis situated ?

A. The os unguis is situated in the orbit, at the internal angle immediately underneath the meeting of the eye-lashes.

69. Q. What is the name of the portions of the os ethmoides which hang down into the nostrils ?

A. The superior turbinated bones and azygos process.

70. Q. What sinuses communicate with the cavity of the nostrils ?

A. There are five sinuses which enter the cavity of the nostrils; viz. the frontal, ethmoidal, and sphenoidal sinuses at the upper part, and the two antral sinuses on the sides.

71. Q. What is the shape of the os malæ ?

A. It is of a quadrangular shape.

72. Q. Enumerate the foramina of the sphenoid bone ?

A. The foramina of the sphenoid bone are, the foramina optica, foramina lacera, foramina rotunda, foramina ovalia, foramina spinosa, and the foramina Viduana.

73. Q. What bones of the cranium are called ossa plana ?

A. The orbital plates of the ethmoid bone.

74. Q. What are the elevations of the superior maxillary bone ?

A. The elevations of the superior maxillary bone are, the alveolar process, the spinous process, the palatine process, the nasal process, the orbital process, the malar process, and the bulbous process.

75. Q. What are the projections of the inferior maxillary bone ?

A. The principal projections of the inferior maxillary bone are, the coronoid and condyloid processes; the angles; a ridge passing externally, and another internally, from the base of the coronoid process to the commencement of the chin; a projection on the inner and outer side of each angle; a projection behind the symphysis, and another on each side the base of the chin.

76. Q. What is the division of the internal ear?

A. The internal ear is divided into the tympanum and labyrinth; and the labyrinth is divided into cochlea, semicircular canals, and vestibulum.

77. Q. How many teeth are there in the adult, and how are they divided?

A. In the adult there are sixteen teeth in each jaw; and they are divided into three classes on each side of the jaw; two incisors, one cuspidatus, two bicuspides, and three molares.

78. Q. On what vertebra is rotation of the head performed?

A. The head rotates upon the second cervical vertebra, by the intervention of the atlas.

79. Q. What are the bones called which compose the spine?

A. Vertebrae, of which there are twenty-four.

80. . . Describe the spine.

A. The spine is a long, bony, and cartilaginous, hollow column, consisting of twenty-four bones, called vertebrae which extend from the occipital bone to the os sacrum, and have many processes and foramina.

81. Q. What is there peculiar to the second vertebra?

A. It has an odontoid process at the upper part of its body.

82. Q. What is there peculiar to the atlas?

A. The atlas has no body nor spinous process; its transverse processes are longer than those of the rest, and terminate in an obtuse point. The superior articular processes are very large, and are hollowed out for the condyles of the occipital bone. There are two tuberosities within its large arch for the attachment of the transverse ligament; it has a groove behind each superior articular process, and there is a surface for the odontoid process to move on.

83. Q. How would you distinguish a dorsal vertebra from the rest?

A. The bodies of the dorsal vertebrae are larger than the cervical, and less than the lumbar; they are more flattened at the sides, more convex before, and more concave behind, than any of the other vertebrae; the spinous process terminates in a round tubercle; the transverse processes are very thick; they have no foramen, as in the cervical; there is an articulating surface on the side of the body, and a superficial one in the points of the transverse processes.

84. Q. Where is the os sacrum situated?

A. The os sacrum is situated at the posterior and lower part of the trunk, below the lumbar vertebrae, and between the ossa innominata.

85. Q. How many foramina open upon the surface of the sacrum?

A. There are four pairs of hole on the anterior part of the sacrum, and the same number on its posterior part.

86. Q. How are the ribs divided ?

A. They are divided into seven true ribs, situated superiorly, and five false, which are placed inferiorly.

87. Q. Into what parts is each rib distinguished ?

A. Each rib is divided into middle part or body, an anterior and posterior extremity, an external and internal surface, and a superior and inferior edge.

88. Q. Do the anterior bony extremities of all the ribs reach the sternum ?

A. No ; only those of the true ribs.

89. Q. Where is the os hyoides situated ?

A. It is situated at the root of the tongue, between it and the larynx.

90. Q. How is the os hyoides divided ?

A. The os hyoides is divided into body, two cornua majora, and two cornua minora.

91. Q. Describe the scapula.

A. The scapula is a triangular bone, situated at the lateral and upper part of the back. It has three margins, a spine, the acromion and coracoid process, and an articular cavity for the head of the os humeri.

92. Q. What bone is fixed to the acromion scapulæ ?

A. The clavicle, or collar-bone.

93. Q. How many bones has the fore-arm

A. Two ; the ulna and radius.

94. Q. Where is the ulna situated ?

A. When the hand is supine, it is situated at the under and inner part of the fore-arm, between the humerus and carpus.

95. Q. What is situated in the groove at the lower internal edge of each rib ?

A. The intercostal artery, vein, and nerve.

96. Q. How many portions of bones does the sternum consist of ?

A. In the adult the sternum consists of three portions ; a superior portion, which nearly resembles the ace of hearts ; a middle portion, which is flat on each side, and larger below than above ; and an inferior portion, which has attached to it the ensiform cartilage.

97. Q. How is the clavicle divided ?

A. The clavicle is divided into a body, and an internal, or sternal, and an external, or scapular, extremity.

98. Q. On what bone do we lean when on our elbow ?

A. The ulna.

99. Q. What is the process called on which we lean ?

A. The olecranon.

100. Q. How many bones compose the shoulder-joint?

A. Two: the scapula and the os brachii.

101. Q. What bone unites the arm to the thorax?

A. The clavicle, or collar-bone.

102. Q. How many bones compose the carpus?

A. Eight: viz. os scaphoides, os lunare, os cuneiform, os orbiculare, os trapezium, os magnum, and os unciforme.

103. Q. What receives the head of the os femoris?

A. The acetabulum, or cup-like cavity of the os innominatum.

104. Q. What ligament is attached to the bottom of the acetabulum?

A. The ligamentum teres of the thigh-bone, which confines the head in its socket.

105. Q. What bone supports the leg?

A. The astragalus, on which the tibia rests.

106. Q. How many bones compose the tarsus?

A. Seven; viz. astragalus, os calcis, os naviculare, os cuboides, and the three cuneiform bones.

107. Q. What is the situation of the os calcis?

A. The os calcis is placed at the posterior part of the tarsus, and forms the heel.

108. Q. Where is the os scaphoides situated?

A. The os scaphoides is placed immediately before the astragalus.

109. Q. What is the situation of the three cuneiform bones of the tarsus?

A. The cuneiform bones are situated before the os scaphoides, and internal to the os cuboides.

110. Q. Where is the trochanter major situated?

A. It forms the great projection at the superior and external part of the thigh-bone.

111. Q. On what bone is the linea aspera situated?

A. On the back part of the os femoris.

112. Q. What are the processes on the lower end of the os femoris called?

A. They are called condyles.

113. Q. What is there particular to be noticed on the os humeri?

A. In noticing the os humeri, we may observe its cylindrical shape, its body and two extremities, the head, neck, great and little tuberosity, the bicipital groove, the two condyles, and trochea.

114. Q. Enumerate the principal parts of the ulna.

A. The principal parts of the ulna are, its body and extremities, the olecranon and coronoid process, the great and little sigmoid cavity, the lesser head, and styloid process.

115. Q. What are the principal parts of the radius?

A. The principal parts of the radius are, its body and two extremities; its round head, which rolls on the ulna; the sigmoid cavity, at its lower extremity; and the styloid process.

116. Q. What are the principal parts of the os femoris?

A. The principal parts of the os femoris are, its body and extremities, the head, neck, the great and little trochanters, the linea aspera, the external and internal condyle, the notch between the condyles, and fossa for the patella.

117. Q. How many bones compose the knee-joint?

A. Three; viz. the patella, the os femoris, and the tibia.

118. Q. What are the bones of the leg called?

A. Tibia and fibula.

119. Q. What is the shape of the tibia?

A. It is long and triangular; larger above than below.

120. Q. What bone forms the inner ankle?

A. The inner ankle is formed of a projection from the lower part of the tibia.

121. Q. What bone forms the outer ankle?

A. The lower end of the fibula forms it.

122. Q. What are the names of the bones of the pelvis?

A. They are four in number; viz. the two ossa innominata, one os sacrum, and one os coccygis.

123. Q. How would you distinguish a male from a female pelvis?

A. In the female pelvis, the os sacrum is shorter and broader than that of the male, the ossa ilia are more expanded, the brim of the pelvis is nearly of an oval shape, it is wider from side to side than from the symphysis pubis to the os sacrum; whereas, in man, it is rounder, and every where of less diameter; the os sacrum is narrower, and the os coccygis more firmly connected.

124. Q. Into how many portions is the os innominatum distinguished?

A. Into three; viz. the iliac, the pubic, and ischiatic portions, which, in the fœtus, are three distinct bones, and become one in the adult.

125. Q. What separates the ossa innominata from each other behind?

A. The sacrum.

126. Q. What are the terminations of the crista of the ilium called?

A. The terminations of the crista of the ilium are called the anterior superior, and posterior superior, spinous processes of the ilium.

127. Q. What is attached to the crista of the ilium?

A. The aponeurosis of the fascia lata, the latissimus dorsi, and obliquus externus abdominis, are attached to its external part, and posteriorly the gluteus maximus.

128. Q. Describe the tibia.

A. The tibia is situated on the inner side of the leg: it is divided into a body and an upper and lower extremity. The upper extremity is called the head, which has two articular surfaces for

the condyles of the os femoris. The body has three surfaces and three edges: the lower extremity is smaller than the upper, and forms the malleolus internus.

129. Q. What is affixed to the apex of the patella?

A. A ligament is attached to the apex of the patella, which is also affixed to the tuberosity of the tibia.

130. Q. How would you distinguish the right patella from the left?

A. By attending to these circumstances:—the apex should be placed upwards, the articular surface turned inwards; then, by recollecting the deepest articular concavity is always externally situated, you may easily distinguish the patella of the right side from that of the left.

131. Q. Is there any bone between the ossa innominata anteriorly?

A. No: the pubic portion of each meets to form the pubes.

132. Q. Where is the os coccygis situated?

A. At the lower part, or apex, of the os sacrum.

133. Q. What is the name of the cavity that receives the head of the os humeri?

A. The glenoid cavity.

134. Q. To what bone does the acetabulum belong?

A. It belongs to the os innominatum.

135. Q. What bones form the hip-joint?

A. The head of the os femoris and the acetabulum of the os innominatum.

136. Q. Where is the tuberosity of the ischium situated?

A. At the inferior part of the os innominatum; we sit upon it.

137. Q. Of what bone is the ascending ramus of the pubes a part?

A. It is a part of the os innominatum.

138. Q. What bones form the thorax?

A. Twelve dorsal vertebræ, the sternum, and twelve ribs; in all, twenty-five bones.

139. Q. What is the use of the periosteum?

A. To allow an attachment for muscles, and to afford a bed for the ramification of vessels to nourish the bone.

140. Q. How many kinds of cartilage are there?

A. There are four kinds of cartilage: 1st, Diarthrodial cartilages, which cover the ends of the bones; 2d, Synarthrodial cartilages, which are placed between several bones, as that of the symphysis pubis; 3d, Interarticular cartilages, placed in some of the joints, as those in the knee-joint, &c.; 4th, Those cartilages which supply the place of bone, as the cartilages of the nose, ears, &c.

141. Q. How many kinds of ligaments are there?

A. There are two kinds of ligaments; viz. the connecting and capsular ligaments.

142. Q. What are the ligaments of the lower jaw, and where are they situated?

A. The lower jaw is articulated by two ligaments on each side, a capsular and lateral ligament: the capsular ligament is affixed around the articular surface of the temporal bone, and round the condyloid process of the lower jaw; the lateral ligament goes from the root of the styloid process of the temporal bone to the inside of the angle of the lower jaw.

143. Q. What are the ligaments about the shoulder-joint?

A. The capsular ligament of the head of the os brachii; the triangular ligament, which extends from the coracoid process to the acromion; the conoid and trapezoid ligaments, that extend from the clavicle to the coracoid process.

144. Q. What are the ligaments of the pelvis?

A. The long and short sacro-ischiatic ligaments; the ligamentum obturans; the ligamentum Poupartii; the transverse ligaments, going from the spinous processes of the ilium to the fourth and fifth lumbar vertebræ; the annular ligament of the ossa pubis; the ligamenta vaga, which pass from the ilium to the sacrum; and the lacertus ligamentosus, that runs from the last lumbar vertebræ along the ridge of the os innominatum to the pubes: besides these, there are the capsular and longitudinal ligaments of the sacrum and the os coccygis.

145. Q. What is the name of the ligament that connects the os femoris to the bottom of the acetabulum?

A. The ligamentum teres.

146. Q. What are the ligaments of the knee-joint?

A. The ligaments of the knee-joint are, the internal lateral, the long and short external lateral, the posterior ligament of Winslow, the ligament of the patella, the capsular ligament, the two ligamenta alaria, the ligamentum mucosum, the anterior and posterior crucial, the transverse ligament of the interarticular cartilages, and the ligaments which fix these cartilages to the protuberance of the tibia.

147. Q. What is the most elastic substance in the body?

A. The most elastic substance in the body is cartilage.

148. Q. Are tendons elastic?

A. No; they are inelastic, otherwise the effect of muscles would be greatly diminished.

149. Q. Where is the ligamentum nuchæ situated?

A. The ligamentum nuchæ arises from the occipital bone, runs down on the back part of the neck, adhering to the spinous processes of the cervical vertebræ, and giving origin to the trapezius and other muscles.

150. Q. Describe the annular ligament of the wrist?

A. The annular ligament of the wrist consists of two parts; 1st, The ligamentum carpi transversale externum, which passes from the styloid process of the ulna and os pisiforme, over the back of the wrist, to be affixed to the styloid process of the radius; 2d,

The *ligamentum carpi transversale internum*, which passes across the fore part of the wrist; it arises from the *os pisiforme* and *os unciniforme*, and is attached to the *os scaphoides* and *os trapezium*, on the outer edge.

151. Q. What parts of the body are free from adipose structure?

A. The skin of the scrotum, penis, and eyelids, has no adipose structure.

152. Q. What are the bones of the tarsus?

A. The bones of the tarsus are seven in number; viz. the *astragalus*, *os calcis*, *os scaphoides*, *os cuboides*, and the three *cuneiform* bones.

153. Q. What muscles are attached to the coracoid process of the scapula?

A. The *coraco brachialis*, the *pectoralis minor*, and the short head of the *biceps flexor cubiti*.

154. Q. Where is the diaphragm situated?

A. Between the thorax and abdomen, forming a vaulted arch or septum attached to the lower borders of the ribs.

155. Q. What are the muscles of the abdomen?

A. The *obliquus externus*, *obliquus internus*, *transversalis abdominis*, *rectus abdominis*, and *pyramidalis*, in pairs.

156. Q. What is the name of the muscle which has three foramina in it?

A. The diaphragm.

157. Q. How is the diaphragm divided?

A. The diaphragm is divided into the greater and less muscle.

158. Q. Describe the origin and insertion of the two muscles of the diaphragm.

A. The greater muscle of the diaphragm arises from all the cartilages of the false and of the last true rib, and is inserted into the *centrum tendinosum*; the less muscle arises from eight slips from the second, third, and fourth lumbar vertebræ, which form two crura; the muscle is then inserted into the *centrum tendinosum* opposite its fellow.

159. Q. Where is the longest crus of the diaphragm situated?

A. On the right side of the fore part of the loins.

160. Q. What tendon passes through the shoulder-joint?

A. The long tendon of the *biceps flexor cubiti*.

161. Q. How many muscles arise from the shoulder and are inserted into the fore-arm?

A. The muscles that are attached to the shoulder and fore-arm are two in number; viz. *biceps flexor cubiti*, and the long head of the *triceps*.

162. Q. How many muscles arise from the arm to be inserted into the fore-arm?

A. The muscles that arise from the arm and are inserted into

the fore-arm are six in number; namely, the anconeus, the short heads of the triceps extensor cubiti, the brachialis internus, supinator radii longus, supinator radii brevis, and pronator radii teres.

163. Q. What muscles arise from the scapula and are inserted into the humerus?

A. The muscles which arise from the scapula and are inserted into the humerus, are the subscapularis, teres major, teres minor, supraspinatus, infraspinatus, coraco-brachialis, and the deltoides.

164. Q. What tendon passes over the hamular process of the sphenoid bone?

A. The tendon of the tensor palati passes over the hook-like process, to be inserted into the palatum molle.

165. Q. What forms the sheath of the rectus abdominis?

A. The sheath of the rectus is formed by the tendons of three muscles; viz. the obliquus externus, the obliquus internus, and the transversalis.

166. Q. What are tendinous partitions called, which are sent betwixt muscles from the fascia covering them?

A. The partitions sent down from the fascia betwixt muscles are called intermuscular ligaments; they connect the muscles, and give origin to many of the fibres.

167. Q. What muscle is inserted into the os pisiforme?

A. The muscle which is inserted into the os pisiforme is called flexor carpi ulnaris.

168. Q. How many muscles are there that arise from the trunk and are inserted into scapula?

A. They are six in number; viz. trapezius, levator scapulæ, pectoralis minor, rhomboideus, serratus magnus, and subclavius.

169. Q. Do the external condyles of the humerus give origin to the extensor or flexor muscles of the fore-arm?

A. To the extensors.

170. Q. What forms the linea alba?

A. The meeting of the flat tendons of the abdominal muscles, along the centre of the abdomen, forms the ensiform cartilage to the symphysis pubis.

171. Q. What muscles are divided in amputation of the thigh?

A. The muscles divided in amputation of the thigh are the biceps flexor cruris, semi-tendinosus, semi-membranosus, gracilis, sartorius, vastus externus, vastus internus, rectus femoris, and the long tendon of the abductor magnus.

172. Q. What muscles are inserted into the patella?

A. The rectus femoris, the vastus externus, the vastus internus, and cruræus.

173. Q. What are the names of the muscles which are inserted into the os calcis?

A. Gastrocnemius externus, gastrocnemius internus, and plantaris.

174. Q. What is the name of the tendon formed by the gastrocnemius externus, and soleus?

A. The tendo Achillis.

175. Q. What muscle crosses the carotid artery and internal jugular vein?

A. These two vessels have the omo-hyoides crossing them, to insert itself into the os hyoides.

176. Q. How many muscles are there on the anterior part of the neck?

A. The muscles on the anterior part of the neck are sixteen in number: viz. platysma myoides, sterno-cleido-mastoideus, omo-hyoides, sterno-hyoides, sterno-thyroideus, thyro-hyoides, crico-thyroideus, digastricus, stylo-hyoides, stylo-glossus, stylo-pharyngeus, myo-hyoides, genio-hyoides, genio-hyo-glossus, myo-glossus, and lingualis.

177. Q. What forms the lineæ transversæ of the abdomen?

A. The lineæ transversæ are formed by the tendinous adhesions of the recti muscles, which produce three or four white lines that shine through the fascia covering each muscle.

178. Q. What forms the linea semilunaris?

A. The linea semilunaris is a semicircular white line which runs obliquely from the os pubis over the side of the abdomen, at the distance of about four inches from the linea alba; it is formed by the tendons of the two oblique and transverse muscles uniting at the rectum.

179. Q. Is there any muscle which arises from one of the abdominal muscles and is inserted into the testicle?

A. Yes: the cremaster muscle arises from the internal oblique, passes through the abdominal ring, and descending upon the spermatic cord, is inserted into the tunica vaginalis of the testis.

180. Q. What are the most important fasciæ of the body?

A. The fascia covering the temporal muscle:—that given off from the biceps covering the fore-arm:—that covering the abdominal muscles and back:—the fascia of the lower extremities:—and the plantar and palmar fascia.

181. Q. From whence does the palmar aponeurosis arise?

A. The palmar aponeurosis arises from the tendon of the palmaris, and from the annular ligament of the wrist.

182. Q. What are bursæ mucosæ, and their use?

A. The bursæ mucosæ are small bags placed under muscles and tendons that are frequently brought into action; they contain a fluid similar to synovia, the use of which is to lubricate the muscles and tendons.

183. Q. Where are the bursæ mucosæ to be found?

A. The bursæ mucosæ are chiefly situated in the extremities, between tendons which rub against each other, or where they play

on the surfaces of bones or joints, and between the integuments and certain prominent points of bone, as at the knee, elbow, and knuckles.

184. Q. From which side of the tendon of the biceps is an aponeurosis sent off?

A. An aponeurosis is sent off from its inside, which assists in forming the fascia of the fore-arm.

185. Q. Describe the fascia covering the fore-arm?

A. The fascia covering the fore-arm is continued from the intermuscular ligaments which pass down to the condyles, covering the os humeri. It is attached to the condyles, and adheres firmly to the olecranon. On the posterior part of the arm it receives a great addition of fibres from the triceps extensor, and on the fore part of the arm it appears to be a continuation of the aponeurosis of the biceps flexor cubiti.

186. Q. What is the use of aponeurosis?

A. The use of aponeurosis is to brace the muscles, by keeping them in their proper place while in action, and to give origin to many muscular fibres of the muscles which lie immediately under.

187. Q. How many arteries are there?

A. Two; viz. the aorta and pulmonary artery: all the other arteries are branches of these two.

188. Q. What is the name of the vessels which nourish the heart?

A. Coronary arteries.

189. Q. What arteries are given off from the arch of the aorta?

A. Three branches; viz. the arteria innominata, the left carotid, and the left subclavian.

190. Q. What parts do the external and internal carotid artery supply?

A. The external carotid artery supplies the face and external parts of the head; the internal carotid artery supplies the brain.

191. Q. What branches does the external carotid artery give off?

A. The external carotid artery gives off eight branches; viz. 1. thyroidea superior; 2. lingualis; 3. facialis; 4. pharyngea inferior; 5. occipitalis; 6. auricularis posterior; 7. temporalis; and 8. maxillaris interna.

192. Q. What are the branches of the internal carotid artery?

A. The internal carotid artery sends off the ophthalmic, the communicans, the anterior cerebri and the media cerebri.

193. Q. What is the situation of the common carotid artery in the neck?

A. The common carotid artery lies on the side of the trachea, between it and the internal jugular vein.

194. Q. What are the arteries of the dura mater?

A. The arteries of the dura mater are the anterior, middle, and posterior meningeal.

195. Q. How many arteries has the thyroid gland?

A. The thyroid gland has four arteries, namely, the two superior thyroideal and the two inferior thyroideal.

196. Q. Through what foramen does the ophthalmic artery enter the orbit?

A. The ophthalmic artery enters the orbit by the foramen opticum; it sends its branches to the forehead, lachrymal gland, fat, muscles, and globe of the eye.

197. Q. What is the course of the arteria transversalis faciei?

A. The transversalis faciei, which is a branch of the temporal, proceeds transversely under the zygoma, over the masseter, and near the parotid duct.

198. Q. Describe the course of the internal carotid as it enters the cranium?

A. The internal carotid, at the base of the cranium, makes a sudden turn forwards, and enters the carotid canal of the temporal bone; it then passes upwards and forwards; after leaving the canal it again bends upwards and forwards by the side of the sella turcica, and perforates the dura mater at the root of the anterior clinoid process; it is suddenly reflected obliquely backwards and upwards; after which it divides into branches.

199. Q. Where does the anterior meningeal artery arise?

A. The anterior meningeal artery arises from the carotid.

200. Q. Where does the posterior meningeal artery arise?

A. The posterior meningeal artery arises from the vertebral.

201. Q. From whence does the middle meningeal artery arise?

A. The middle meningeal artery arises from the internal carotid artery.

202. Q. What is the course of the external maxillary artery over the jaw-bone?

A. The external maxillary artery passes before the edge of the masseter over the middle and lateral part of the jaw-bone.

203. Q. What are the branches which the subclavian artery gives off?

A. They are six in number; viz. arteria mammaria interna, thyroidea inferior, intercostalis, vertebralis, cervicalis profunda, and cervicalis superficialis.

204. Q. What are the muscles the subclavian artery passes between, in going over the first rib?

A. The subclavian artery, as it passes over the first rib, goes between the anterior and middle scalenus muscles.

205. Q. Where does the subclavian artery terminate?

A. The subclavian artery terminates in the axillary artery at the first rib, between the insertion of the scaleni muscles.

206. Q. What are the branches of the internal maxillary artery?

A. The internal maxillary artery gives off the arteria meninge media, which goes to the dura mater through the foramen spi-

nosum; the inferior maxillary, which enters the canal of the lower jaw; the alveolar, to the back teeth of the upper jaw; the infra-orbital, which gets upon the cheek, through the infra-orbital canal; the palato-maxillary, which ramifies on the palate; and the spheno-palatine, to the cavity of the nose.

207. Q. At what part is the brachial artery considered to begin?

A. The brachial artery begins immediately below the tendon of the latissimus dorsi?

208. Q. From what artery does the inferior thyroid arise?

A. The inferior thyroid artery arises from the subclavian.

209. Q. How many branches does the axillary artery send off?

A. The axillary artery generally gives off four arteries, viz. thoracica longior, thoracica superior, thoracica humeraria, and thoracica alaris.

210. Q. What is the course of the brachial artery?

A. The brachial artery descends behind the inner edge of the biceps, over the coraco-brachialis, covered by the tendinous aponeurosis of the arm, and having the triceps extensor cubiti on the back part of it; when it gets to the bend of the arm it divides into two principal branches.

211. Q. Between what tendons does the radial artery lie at the wrist?

A. The radial artery lies at the wrist, between the tendons of the flexor carpi radialis and supinator radii longus.

212. Q. What is the course of the ulnar artery?

A. The ulnar artery, having passed under the flexors of the hand and fingers to the inner part of the fore-arm, along the outer side of the flexor carpi ulnaris, near the wrist, runs between the tendons of the flexor carpi ulnaris and flexor digitorum profundus; it then passes over the annular ligament and under the palmar fascia, to form the superficial palmar arch.

213. Q. What is the course of the radial artery?

A. The radial artery passes over the pronator teres, and takes the direction of the radius; when it gets to the wrist it gives off several branches, and then forms the arcus profundus.

214. Q. At what distance from the elbow does the brachial artery divide?

A. At about an inch below the elbow the brachial artery generally divides into radial and ulnar.

215. Q. What artery forms the superficial palmar arch?

A. The superficial palmar arch is chiefly formed by the ulnar artery?

216. Q. What forms the profundal palmar arch?

A. The profundal palmar arch is chiefly formed by the radial artery.

217. Q. What are the arteries given off from the thoracic aorta?

A. The thoracic aorta gives off the bronchial, the œsophageal, and the inferior intercostal arteries.

218. Q. What vessels does the right pulmonary artery pass before it reaches the lungs?

A. The right pulmonary artery passes behind the aorta and superior cava.

219. Q. What course does the abdominal aorta take?

A. The aorta passes from the thorax into the abdomen between the crura of the diaphragm; as it descends on the fore part of the spine, it inclines a little to the left: it gives off branches in its way downwards, and bifurcates on the fourth lumbar vertebra.

220. Q. What is the course of the coronaria ventriculi?

A. The coronaria ventriculi passes from the cœliac artery towards the left side; it first attaches itself to the stomach near its left extremity, and sends a branch round the cardia, named ramus coronariæ dexter. The trunk is then continued along the lesser curvature, to inosculate with the pylorica or coronaria sinister.

221. Q. What are the branches of the abdominal aorta?

A. The abdominal aorta gives off the phrenic, the cœliac, the superior mesenteric, the renal, the spermatic, the lumbar, and the sacral arteries.

222. Q. What is the course of the arteria splenica?

A. The arteria splenica, after having left the cœliac artery, passes under the stomach and along the upper border of the pancreas, and enters the concave surface of the spleen.

223. Q. What does the cœliac artery supply?

A. The cœliac artery supplies the stomach, liver, and spleen.

224. Q. What are the arteries of the stomach called?

A. Coronary; they are four in number; viz. the arteria coronaria, gastrica dextra, gastrica sinistra, and pylorica. The veins are called gastric.

225. Q. Where is the ductus arteriosus situated in the fœtus?

A. It passes obliquely from the ascending aorta to the pulmonary artery.

226. Q. What are the branches of the superior mesenteric artery?

A. The superior mesenteric artery gives off, on the right side, three branches; the ilio-colica, the branches of which go to the cæcum, and to a portion of the ileum; the colica dextra, which supplies the right side of the colon; and the colica media, which divides on the mesocolon, and sends one branch to the right side and another to the left, that inosculates with the branch from the inferior mesenteric artery.

227. Q. What is the course of the hepatic artery?

A. It runs from the cœliac artery in a direction opposite to the splenic, towards the right side: after giving off several branches, it divides into the right and left hepatic. The right is distributed

to the right lobe of the liver, and to the gall-bladder. The left supplies the whole of the left lobe, the lobulus Spigelii, and part of the right lobe.

228. Q. What are the branches of the pancreatic artery?

A. The pancreaticæ parvæ, which go to the pancreas; the vasa brevia, which go to the great curvature of the stomach; the gastro-epiploica sinistra, which runs along the great curvature of the stomach, inosculating with the gastro-epiploica dextra.

229. Q. What are the branches of the hepatic artery?

A. The hepatic artery gives off the pylorica or coronaria dextra, which ramifies on the pylorus and lesser curvature of the stomach; the gastro-epiploica dextra, which passes under the pylorus to reach the great curvature of the stomach: the pancreatico duodenalis, which is often a branch of the gastro-epiploica, goes to the pancreas and duodenum.

230. Q. What are the arteries called which supply the kidneys?

A. The renal or emulgent arteries.

231. Q. What is the course and distribution of the epigastric artery?

A. It arises from the femoral artery, just as it is about to pass under Poupart's ligament; it passes upwards and inwards at the upper and outer part of the abdominal ring, behind the spermatic cord, running along the edge of the transversus in an oblique manner to the pyramidalis; it then ascends under the middle of the rectus, furnishing branches to the abdominal parietes, and terminates above the umbilicus, anastomosing with the mammary.

232. Q. What is the course of femoral artery?

A. The femoral artery passes over the head of the os femoris down into a hollow at the upper and inner part of the thigh, with the rectus and sartorius muscles upon the outside, and the adductor on the inner side; it descends along the inside of the thigh between the vastus internus and triceps, it then gradually bends backwards till it reaches the ham to become the popliteal.

233. Q. What are the names of the valves at the origin of the aorta?

A. They are called the semilunar valves, and are three in number.

234. Q. What are the branches of the inferior mesenteric artery?

A. The inferior mesenteric passes in the mesentery to the left side of the abdomen, and gives off—1. The colica sinistra, which ascends along the left side of the colon, to inosculate with the colica media; 2. branches which pass to the sigmoid flexure of the colon; 3. the arteria hæmorrhoidalis interna, which runs down behind the rectum; on which it ramifies.

235. Q. How far distant from the aorta and Poupart's ligament does the common iliac divide?

A. The common iliac artery divides at rather more than half way between the aorta and Poupart's ligament.

236. Q. Which is the largest branch of the internal iliac?

A. The arteria glutea, or iliaca posterior, which passes out of the pelvis at the upper part of the sciatic notch.

237. Q. What is the distribution of the spermatic arteries?

A. The spermatic arteries in men pass through the abdominal ring to be distributed to the testes; while in woman they remain within the abdomen, and are dispersed upon the ovaria and uterus.

238. Q. What are the branches of the internal iliac artery?

A. The internal iliac gives off the obturator, the gluteal, the ischiatic, and pudical.

239. Q. How are the trunks of arteries nourished?

A. The arterial trunks are nourished by the vasa vasorum, which arise from the nearest small branches, and are every where dispersed on their surface.

240. Q. What are the terminations of the arteries?

A. One termination is in veins—another in secreting extremities—a third in glands—a fourth in cells, as in the penis—and a fifth termination is in anastomoses.

241. Q. What change do the collateral arteries undergo when a large arterial trunk is tied?

A. They dilate, their coats become stronger, and acquire additional capacity; they are also found to become tortuous.

242. Q. How are arteries distinguished from veins?

A. By their coats being whiter and more dense, and also more elastic. Their apertures gape, in the living body, and they pulsate. The arteries and veins of the lower extremity are very similar, in regard to the thickness of their coats; the popliteal artery and vein both gape.

243. Q. What is the course of the external jugular vein on the neck?

A. The external jugular vein being formed by branches from the temple, side of the face, and throat, crosses obliquely over the sterno-mastoid muscle, passes behind its outer edge, and goes beneath the clavicle to enter the subclavian vein.

244. Q. On which side of the carotid artery does the internal jugular vein run?

A. The internal jugular vein runs on the outer side of the carotid artery.

245. Q. How is the vena cava abdominalis formed, and what is its course?

A. The vena cava abdominalis is formed by the junction of the two common iliac veins: it passes up through the abdomen on the lumbar vertebræ, and on the right side of the aorta.

246. Q. Do the superficial veins of the fore-arm lie above the fascia or below it?

A. The principal veins of the fore-arm lie above the fascia.

247. Q. What are the veins at the flexure of the arm?

A. The cephalic; the median-cephalic, the basilic, and the median-basilic.

248. Q. Have the veins of the dura mater any valves?

A. No, they have none.

249. Q. Where is the torcular of Herophilus to be found?

A. The torcular of Herophilus is to be found in the junction of the falx and the tentorium.

250. Q. What are the sinuses of the dura mater?

A. The sinuses of the dura mater are, the cavernous, the circular, the superior and inferior petrosal, the occipital, the superior and inferior longitudinal and the torcular Herophili.

251. Q. How are the veins of the extremities divided?

A. The veins of the extremities are divided into deep-seated and superficial.

252. Q. What are the superficial veins of the lower extremity?

A. The superficial veins of the lower extremity are the saphena major and saphena minor.

253. Q. Have the deep-seated veins the same names as the arteries they accompany?

A. Yes; as for example, you have in the upper extremity one axillary vein, two brachial veins, two radial, two interosseal, and two ulnar veins.

254. Q. What are the vessels which form the vena portæ?

A. The superior and inferior mesenteric, and the splenic veins.

255. Q. On which side of the aorta is the longest emulgent artery situated?

A. On the right, in consequences of the vena cava being placed on that side, and the artery having to pass behind that vessel.

256. Q. What is the situation of the intercostal or great sympathetic nerve in the neck?

A. The intercostal nerve lies behind the carotid artery in the cellular membrane, betwixt that vessel and the muscles covering the vertebræ of the neck.

257. Q. What is the situation of the par vagum in the neck?

A. On separating the internal jugular vein, and trunk of the carotid artery, the par vagum is seen lying in the same sheath of cellular substance with those vessels.

258. Q. What nerve lies upon the belly of the anterior scalenus muscle?

A. The phrenic nerve lies upon the anterior scalenus muscle, and gets into the thorax betwixt the subclavian artery and vein.

259. Q. What nerve is that which is seen ascending between

the under surface of the trachea and œsophagus at the lower part of the neck ?

A. The recurrent of the par vagum.

260. Q. What nerves supply the diaphragm ?

A. The phrenic or diaphragmatic nerves.

261. Q. Where does the great sciatic nerve arise ?

A. From a plexus of nerves formed by the fourth and fifth lumbal nerves, joined by the first, second, and third sacral.

262. Q. What is the name of the ganglion in the abdomen which supplies most of the abdominal viscera ?

A. The semilunar ganglion.

263. Q. What does the foramen magnum occipitale transmit ?

A. The spinal marrow with its membranes, the vertebral arteries, and the accessory nerves of Willis.

264. Q. What nerves form the great sympathetic ?

A. A branch of the sixth pair of nerves with a recurrent twig of the second branch of the fifth pair of nerves.

265. Q. Do the olfactory nerves supply the nose with the sense of feeling ?

A. No, but branches from the fifth pair do.

266. Q. From what part of the brain do the optic nerves arise ?

A. They arise from the thalami nervorum opticorum.

267. Q. From what part of the brain do the olfactory nerves arise ?

A. The olfactory nerves arise from the corpora striata.

268. Q. What part of the brain gives origin to the third and fourth pair of nerves ?

A. The third pair of nerves arise from the crura cerebri, and the fourth pair from near the corpora quadrigemina.

269. Q. Whence do the fifth and sixth pair of nerves arise ?

A. The fifth pair of nerves arise from the sides of the pons Varolii, and the sixth from between the pons Varolii and corpora olivaria.

270. Q. What do the seventh, eighth, and ninth pair of nerves arise from ?

A. The seventh pair of nerves arise from the posterior and lateral part of the pons Varolii; the eighth pair arise from the corpora olivaria, and the ninth from the corpora pyramidalia.

271. Q. What nerves pass through the foramen lacerum orbitale superius ?

A. The third, the fourth, the first branch of the fifth and sixth pair of nerves.

272. Q. Through what foramina do the fifth pair of nerves pass out of the cranium ?

A. Through the foramen lacerum orbitale superius, foramen rotundum, and foramen ovale, in separate branches.

273. Q. Does the arm receive nerves from the brain, or from the spinal marrow?

A. From the spinal marrow.

274. Q. What are the branches of the fifth pair of nerves?

A. The branches of the fifth pair of nerves are the ophthalmic, the superior maxillary, and the inferior maxillary.

275. Q. What nerve supplies the nose with the sense of smelling?

A. The olfactory, or first pair.

276. Q. What is the first ganglion formed by the intercostal nerve called?

A. The cervical ganglion.

277. Q. What forms the chorda tympani?

A. The chorda tympani is formed by the portio dura; it is a reflected twig of that nerve which passes between the long processes of the malleus and incus, and over the membrana tympani.

278. Q. What are the nerves that form the lenticular ganglion of the eye?

A. The lenticular ganglion is formed by a branch from the third and fifth pair of nerves.

279. Q. What nerve supplies the tongue for the organ of taste?

A. A branch of the fifth pair, which is termed the gustatory nerve.

280. Q. What nerve perforates the sterno-cleido-mastoideus muscle?

A. The sterno-cleido-mastoideus is pierced about its middle, by the nervus accessorius.

281. Q. How is the axillary plexus formed?

A. The axillary plexus is formed of the four inferior cervical and first dorsal nerves.

282. Q. Which is the largest nerve of the human body?

A. The sciatic nerve is the largest nerve of the body.

283. Q. What plexus of nerves surrounds the axillary artery?

A. The brachial plexus.

284. Q. Describe the course of the great sciatic nerve out of the pelvis.

A. This nerve is formed from the fourth and fifth lumbar, and three first sacral nerves; it passes betwixt the pyriformis and gemini muscles, and escapes from the back part of the pelvis by the sciatic notch.

285. Q. Describe the course of the anterior crural nerve while in the pelvis?

A. The anterior crural nerve at its origin lies under the psoas magnus muscle, &c. and, as it descends passes betwixt the psoas magnus and iliacus internus, till, having passed under Poupert's ligament, it emerges from betwixt those muscles, and appears on the outside of the inguinal artery.

286. Q. What forms the anterior crural nerve?

A. The three or four superior lumbar nerves.

287. Q. Describe the course of the obturator nerve and its origin.

A. The obturator nerve is formed by branches of the second, third, and fourth lumbar nerves: it lies under the inner border of the psoas magnus, descends into the pelvis, and goes obliquely downwards, accompanying the obturator artery through the thyroid hole.

288. Q. What forms the phrenic nerve?

A. The phrenic nerve is formed by the third and fourth cervical; it also receives a filament from the second.

289. Q. Where is the external cutaneous nerve situated at the head of the arm?

A. The external cutaneous nerve is situated at the bend of the arm, under the cephalic and the median cephalic veins.

290. Q. What is the situation of the internal cutaneous nerve at the bend of the arm?

A. The internal cutaneous nerve is situated under the median basilic nerve; it frequently sends a small twig over the vein.

291. Q. What is a gland?

A. A gland is an organic body composed of blood vessels, nerves, and absorbents, and destined for the secretion of some peculiar fluid.

292. Q. How are glands distinguished?

A. They are distinguished into four classes:—simple glands—compounds of simple glands—conglobate glands—conglomerate glands.

293. Q. Where are the mesenteric glands situated?

A. In the fat between the layers of the mesentery, near the branches of the blood-vessels.

294. Q. What is the name given to the absorbents entering a gland?

A. They are called vasa inferentia.

295. Q. Absorbent vessels go out from the opposite side of the glands, in the manner they entered them: what name is given to those vessels?

A. They are called vasa efferentia.

296. Q. Where is the pituitary gland situated?

A. In the sella turcica, a cavity in the sphenoid bone.

297. Q. Where is the lachrymal gland situated?

A. In a depression of the orbital process of the frontal bone within the orbit.

298. Q. What are the salivary glands called?

A. They are the parotid gland, the sublingual glands, the sub-maxillary glands, the glands of the cheek, the labial glands, and molar glands.

299. Q. Where does the excretory duct of the parotid gland open?

A. The excretory duct of the parotid gland, or Steno's duct,

passes obliquely over the outside of the masseter muscle, and perforates the cheek, opening near the second molaris.

300. Q. What is the name of the excretory duct of the submaxillary gland, and where does it open?

A. The excretory duct of the submaxillary gland is called ductus Wartonii; it passes between the genio-glossus and mylo-hyoideus muscles, and opens on the side of the frænum linguæ.

301. Q. Where is the thyroid gland situated?

A. Upon the larynx and trachea, lying upon the cricoid cartilage, and horns of the thyroid cartilage.

302. Q. What are the glands called situated at the root of the lungs?

A. Bronchial glands; they are of a dark colour.

303. Q. How are the absorbents divided?

A. The absorbents are divided into lymphatic and lacteal vessels?

304. Q. Do absorbents exist in every part of the body?

A. Yes: it is supposed that absorbents exist in every part of the body; but they have not yet been observed in the cavity of the cranium, nor in the placenta.

305. Q. Where is the prostrate gland situated?

A. It lies directly under the symphysis pubis; it embraces the neck of the bladder, and rests upon the rectum.

306. Q. Where are Cowper's glands to be found?

A. Cowper's glands are situated near the bulb of the urethra, before the prostate gland.

307. Q. What is the line called that runs along the centre of the corpus callosum?

A. The line in the centre of the corpus callosum is called raphe.

308. Q. Where is the fornix situated?

A. The fornix is situated immediately under the septum lucidum.

309. Q. How do the posterior crura of the fornix terminate?

A. The posterior crura of the fornix terminate by forming the corpora fimbriata.

310. Q. What forms the lyra?

A. The lyra is formed by the medullary lines of the inferior surface of the fornix.

311. Q. Where is the hippocampus minor situated?

A. The hippocampus minor is situated in the posterior horn of the lateral ventricle.

312. Q. Where is the hippocampus minor situated?

A. The hippocampus minor is situated in the inferior horn of the lateral ventricle.

313. Q. Where is the third ventricle situated?

A. The third ventricle is a space between the two thalami nervorum opticorum.

314. Q. Where is the commissura mollis situated?

A. The commissura mollis is a short cord of soft substance, situated at the middle and anterior part, on the inner sides of the thalami nervorum opti-
corum.

315. Q. Has the cerebellum convolutions?

A. No: there are on its surface deep sulci or grooves.

316. Q. At what part of the cerebellum are the appendices ver-
miformes to be found?

A. The appendices vermiformes are to be found at the anterior superior part, and the inferior part of the cerebellum.

317. Q. How many membranes has the brain?

A. Three: viz. the dura mater, the pia mater, and the tunica arachnoides.

318. Q. What vessel runs in the falciform process of the dura mater?

A. The superior longitudinal sinus is the principal vessel.

319. Q. Where is the tentorium situated?

A. Between the cerebrum and the cerebellum.

320. Q. How many lobes has the brain?

A. Six; viz. two anterior, two posterior, and two middle or inferior lobes.

321. Q. How many hemispheres has the cerebrum?

A. Two; viz. the right and the left.

322. Q. What are the cavities in the brain called?

A. They are called ventricles.

323. Q. What separates the lateral ventricles from each other?

A. The septum lucidum.

324. Q. From what part of the brain does the pineal gland arise?

A. From the thalamus nervi optici on each side by peduncles.

325. Q. What separates the thalamus nervi optici from the corpus striatum?

A. A white prominent line, call'd teania semicircularis.

326. Q. What are the processes of the dura mater called?

A. They are three in number, and are called the falciform process, the tentorium, and the septum cerebelli.

327. Q. How many laminæ has the dura mater?

A. The dura mater has two laminæ.

328. Q. What parts of the brain does the falx separate?

A. The falx separates the two hemispheres.

329. Q. What does the tentorium separate?

A. The tentorium separates the cerebrum from the cerebellum.

330. Q. How are the sinuses of the dura mater formed?

A. The sinuses of the dura mater are formed by the separation of the two layers of that membrane.

331. Q. Does the pia mater dip between the convolutions of the brain, or pass over them?

A. The pia mater dips between the convolutions; but the tunica arachnoidea passes over them.

332. Q. What membrane nourishes the internal table of the skull?

A. The external lamina of the dura mater nourishes the internal table of the skull.

333. Q. What are the contents of the cranium?

A. The cranium contains the cerebrum, cerebellum, and medulla oblongata;—the dura mater, the pia mater, and tunica arachnoidea;—nine pair of nerves, and the accessory nerves of Willis;—several sinuses,—the arteries that nourish the brain and its membranes, and the veins that return the blood into the sinuses: and also absorbent vessels.

334. Q. How is the pia mater nourished?

A. The pia mater is nourished by arteries from the brain.

335. Q. Where are the tubercula quadrigemina situated?

A. The tubercula quadrigemina are situated behind the thalami nervorum opticorum, and under the pineal gland.

336. Q. What canal passes under the tubercula quadrigemina?

A. The canal is called iter a tertio ad quartum ventriculum; it forms the communication between the third and fourth ventricle.

337. Q. What is situated at the anterior part of the third ventricle?

A. At the anterior part of third ventricle are situated the anterior crura of the fornix, the commissura anterior cerebri, and infundibulum.

338. Q. What forms the floor of the third ventricle?

A. The commissura inferior.

339. Q. Where is the valvula magna cerebri situated?

A. The valvula magna cerebri is situated over the iter a tertio ad quartum ventriculum, and the upper part of the fourth ventricle.

340. Q. What forms the arbor vitae?

A. It is formed by the medullary and cineritious substance of the brain, which are distributed in such a manner as to give the appearance of the branches of a shrub.

341. Q. What are the medullary tracts at the sides of the valvula magna cerebri called?

A. These lines are called processus ad testes, or columnae valvulae Vieussenii.

342. Q. Where is the calamus scriptorius situated?

A. The calamus scriptorius is situated in the fourth ventricle.

343. What is to be observed on the medulla oblongata?

A. On the medulla oblongata are seen the pons Varolii, the corpora olivaria, and corpora pyramidalia.

344. Q. Describe the eye.

A. The eye is divided into external and internal parts. The external parts are the supercilia, the palpebra, the cilia, lachrymal caruncle, nasal duct and muscles of the bulb, and the tunica conjunctiva. The internal parts are the sclerotic coat, the cornea, the choroid coat, iris, uvea, retina, hyaloid membrane, capsule of the lens and vitreous humours, three humours and two chambers.

345. Q. How many coats has the eye?

A. Three; viz. the tunica sclerotica, the tunica choroides, and the retina:—the anterior portion of the sclerotica is transparent, and called the cornea transparens: the anterior part of the choroid membrane forms the iris and the uvea; and there is, also, the membrane of the lens and of the vitreous humour; so that many anatomists make eight coats.

346. Q. What is the tunica conjunctiva?

A. The tunica conjunctiva is a reflexion of the inner membrane of the eyelid, over the surface of the eye; it prevents extraneous bodies passing deep into the socket.

347. Q. Which is the most dense coat of the eye?

A. The tunica sclerotica.

348. Q. What is the structure of the cornea?

A. The cornea is divisible into several lamellae between which a transparent fluid is noticed.

349. Q. Which is the most vascular coat of the eye?

A. The tunica choroides is the most vascular coat of the eye: the ciliary arteries ramify copiously on it, and the veins are numerous and contorted.

350. Q. What separates the anterior from the posterior chamber?

A. The curtain formed by the iris and uvea.

351. Q. What is contained in the capsule of the crystalline lens?

A. The crystalline lens and a little water.

352. Q. What artery nourishes the crystalline lens?

A. The arteria centralis retinae.

353. Q. Where is the pigmentum nigrum of the eye situated?

A. Upon the uvea, behind the iris, and upon the surface of the tunica choroidea.

354. Q. Where is the lachrymal sac situated?

A. In the superior part of the lachrymal groove, or the commencement of the ductus ad nasum behind the tendon of the orbicularis.

355. Q. What part of the eye is the true organ of vision?

A. The retina.

356. Q. What secrets the pigmentum nigrum of the choroid membrane?

A. The pigmentum nigrum of the choroid membrane is secreted by the arteries of that membrane.

357. Q. How many chambers has the eye?

A. Two; an anterior and a posterior chamber.

358. Q. What gives the whitish blue color to the bulb of the eye?

A. The whitish blue color of the bulb of the eye is occasioned by the expanding tendons of the muscles shining through the transparent tunica conjunctiva.

359. Q. Where are the vasa vorticosa situated?

A. The vasa vorticosa are situated on the choroid coat of the eye; they are formed by a contortion of the veins of that membrane?

360. Q. What bones form the lachrymal groove or ductus ad nasum, and where does it terminate?

A. The lachrymal bone, the superior maxillary bone, and the inferior spongy bone. It terminates at the lower and lateral parts of the nose, at the inner and fore part of the antrum maxillare, under the os spongiosum inferius, in a straight line with the second dens molaris.

361. Q. What is the division of the external ear?

A. The external ear is divided into the pinna, lobus, and meatus auditorius.

362. Q. What are the eminences of the external ear?

A. There are four eminences on the external ear; viz. helix, antihelix, tragus, and antitragus.

363. Q. Have the depressions on the external ear any names?

A. Yes; they are distinguished into the fossa navicularis, the fossa innominata, and the concha.

364. Q. What is the general division of the internal ear?

A. The internal ear is divided into the tympanum and labyrinth, which consist of the cochlea, vestibulum, and semicircular canals.

365. Q. Where does the Eustachian tube begin?

A. The Eustachian tube begins at the upper and fore part of the tympanum.

366. Q. What membrane lines the meatus auditorius externus?

A. The meatus is lined by a continuation of the skin.

367. Q. If a probe were passed to the bottom of the meatus auditorius, what would it rest on?

A. The membrana tympani.

368. Q. Where is the fenestra ovalis situated?

A. The fenestra ovalis is situated in the tympanum, above the promontory.

369. Q. Where do the cells of the mastoid process open?

A. They open at the upper and back part of the tympanum.

370. Q. Where does the fenestra rotunda lead to?

A. The fenestra rotunda leads to the cochlea.

371. Q. How many openings are there in the vestibulum?

A. Five foramina, which communicate with the semicircular canals;—the fenestra ovalis, and a round hole which communicates with one of the canals of the cochlea.

372. Q. What are the principal parts of the cochlea?

A. The principal parts of the cochlea are, the gyri, the modiolus, the infundibulum, the scala vestibuli, and the scala tympani.

373. Q. How are the semicircular canals distinguished?

A. The semicircular canals are three in number; they are distinguished into the superior or vertical, the posterior or oblique, and the exterior or horizontal.

374. Q. How is the palate divided?

A. It is divided into palatum durum and palatum molle.

375. Q. What forms the first arch of the palate?

A. The constrictor-isthmi faucium, covered by the skin of the mouth.

376. Q. What are the papillae minimae and papillae mediae of the tongue formed by?

A. The papillae minimae and mediae are formed by the extremities of nerves surrounded by a lace-work of blood-vessels.

377. Q. What forms the second arch of the palate?

A. The levator palati, covered by the skin of the mouth.

378. Q. What lies between the two arches of the palate?

A. The tonsil gland.

379. What does the uvula consist of?

A. The uvula consists of the azygos uvulae, enveloped in the membrane of the palate.

380. Q. Where is the pharynx, and what is it?

A. The pharynx is a large muscular bag in form of an irregular funnel, at the back of the mouth, which terminates in the oesophagus.

380. Q. What forms the inner membrane of the pharynx?

A. The inner membrane of the pharynx is formed by the continuation of the membrane of the mouth.

381. Q. What are the principal glands which secrete the saliva?

A. The saliva is secreted chiefly by the parotid, the submaxillary, and the sublingual glands.

382. Q. How is the tongue divided?

A. The tongue is divided into a basis and apex, a superior and inferior surface, and two edges.

383. Q. How many cartilages has the larynx?

A. The larynx has five cartilages; viz. the thyroid, the cricoid, the two arytenoid, and the cartilage of the epiglottis.

384. Q. What are the viscera of the thorax?

A. The pleura, the lungs, the thymus gland (in children), the

œsophagus, the ductus thoracicus the arch of the aorta, branches of the vanae cavae, the vena azygos, the pericardium, the heart, the phrenic nerve, the par vagum, and the great intercostal nerves.

385. Q. How many lobes has the left lung?

A. It has two lobes.

386. Q. How many lobes has the right lung?

A. The right lung has three lobes.

387. Q. What do the bronchia terminate in?

A. The bronchia become membranous tubes, which terminate in the air-cells.

388. Q. What separates the chest into two cavities?

A. The mediastinum, which is formed by the pleura.

389. Q. What are contained in the posterior mediastinum?

A. The œsophagus, the bronchia, the large vessels of the heart, the par vagum, great intercostals, and the thoracic duct.

390. Q. What is there in the anterior mediastinum that disappears towards adult age?

A. The thymus gland.

391. Q. How many membranes has the pericardium?

A. The pericardium has two membranes; an external and an internal.

392. Q. What part of the thorax does the pericardium adhere most to?

A. The pericardium adheres most firmly to the tendinous part of the diaphragm.

393. Q. What arteries nourish the pleura?

A. The arteries that nourish the pleura are branches from the intercostal, mammary, diaphragmatic, bronchial, and œsophageal arteries.

394. Q. What is the heart?

A. The heart is a hollow muscular viscus, situated in the pericardium, in the cavity of the thorax, resting upon the diaphragm.

395. Q. Has the external surface of the heart any membranous covering?

A. Yes: it has a membranous coat, which is a reflexion of the inner layer of the pericardium.

396. Q. Where are the muscoli pectinati situated?

A. In the right auricle of the heart.

297. Q. Where is the tricuspid valve situated?

A. The tricuspid valve is situated between the right auricle, and right ventricle hanging from the opening between them.

398. Q. Where does the pulmonary artery originate?

A. The pulmonary artery arises from the right ventricle.

399. Q. Do the auricles of the heart communicate before birth?

A. Yes: by the foramen ovale.

400. Q. Where is the Eustachian valve situated?

A. At the entrance of the inferior cava, within the right auricle of the heart.

401. Q. How many openings has the right auricle of the heart?

A. Four; viz. the opening of the vena cava superior, that of the vena cava inferior, that of the coronary vein, and the ostium venosum.

402. Q. What is the valve of Eustachius formed by?

A. The Eustachian valve is formed by a fold of the inner membrane of the right auricle.

403. Q. How many openings has the left auricle of the heart?

A. Five; viz. those of the four pulmonary vessels and the ostium venosum.

404. Q. What are the differences between the foetal and adult heart?

A. In the foetal heart, an opening exists between the auricles in the septum auricularum, called the foramen ovale; this is closed in the adult heart. An artery also passes from the pulmonary artery obliquely to the ascending aorta in the foetus, which is called canalis arteriosus: this becomes a ligament in the adult.

405. Q. What are the regions of the abdomen?

A. The abdomen is divided into three regions, each of which is subdivided:—1. The epigastric region, which is the superior: its sides are termed hypochondriac regions.—2. The umbilical region, situated in the centre of the abdomen, the sides of which are termed iliac or epicolic regions.—3. The hypogastric region, which is subdivided into three regions, one middle, termed regio pubis, and two lateral, named inguinal regions.

406. Q. What viscera are contained in the abdomen?

A. The omentum, the stomach, the large and small intestines, the liver and gall bladder, the mesentery, the lacteal vessels, the thoracic duct, the spleen, the pancreas, the kidneys and suprarenal capsules, part of the aorta descendens, and vena cava ascendens, and the abdominal nerves.

407. Q. What is the membrane called, that lines the cavity and covers the viscera of the abdomen?

A. The peritoneum.

408. Q. What are the four ligamentary cords seen upon the outside of the peritoneum at its anterior and inferior part?

A. They are the remains of parts peculiar to the foetus; viz. the two umbilical arteries, the umbilical vein, and the urachus.

409. Q. What forms the mesentery?

A. The mesentery is formed by a doubling of the peritoneum.

410. Q. Where does the mesentery begin?

A. The mesentery begins at the termination of the duodenum.

411. Q. How is the colon fixed to the spine?

A. The colon is fixed to the spine by a continuation of the mesentery, which is called mesocolon.

412. Q. Which is the largest viscus of the abdomen ?

A. The liver.

413. Q. Describe the liver ?

A. The liver is the largest abdominal viscus, placed in the right hypochondriac region, and partly in the epigastric region. It is distinguished into three lobes, is suspended by five ligaments, and is composed of arteries, veins, nerves, absorbents, excretory ducts, and cellular membrane, and is covered by the peritonaeum.

414. Q. Are the kidneys completely enveloped in the peritonaeum ?

A. No : only their anterior surfaces.

415. Q. Where is the great lobe of the liver situated ?

A. The great lobe of the liver is situated in the right hypochondriac region, and rests upon the pylorus colon, and top of the right kidney.

416. Q. Where is the small lobe of the liver situated ?

A. The small lobe of the liver is situated in the epigastric region, only a small portion of it lying in the left hypochondriac region.

417. Q. What are the vessels surrounded by the capsule of Glysson ?

A. The vessels surrounded by the capsule of Glysson are the vena portae, the hepatic artery, the hepatic veins, the excretory ducts, and some absorbents.

418. Q. What forms the capsula of Glysson ?

A. A reflexion of the peritonaeum, which with a quantity of cellular substance, surrounds the vessels and nerves of the liver just before they enter that viscus.

419. Q. What are the ligaments of the liver ?

A. The ligaments of the liver are, the broad ligament, the round ligament, the right and left lateral ligaments, and the coronary ligament.

420. Q. What artery nourishes the liver ?

A. The hepatic artery, which is a branch of the coeliac.

421. Q. What are the depressions of the liver ?

A. The depressions are.—1. The great fissure :—2 a fissure for the vena portae :—3. one for the venae cavae :—4. a furrow between the left lobe and lobulus Spigelii for the venal canal in the foetus : 5. a depression for the gall-bladder :—6. a superficial cavity caused by the stomach :—and 7. a great sinus for the spine and oesophagus at the posterior part of the left lobe.

422. Q. What is the use of the liver ?

A. To secrete bile.

423. Q. What are the excretory ducts of the liver called ?

A. Pori biliarii.

424. Q. Where is the gall-bladder situated ?

A. The gall-bladder is situated in the right hypochondrium,

and attached to a depression in the right lobe of the liver.

425. Q. How many coats has the gall-bladder?

A. The gall-bladder has three coats; viz. an external or peritoneal, a middle or muscular coat, and an internal or villous coat.

426. Q. What is the appearance of the internal surface of the gall-bladder?

A. The internal surface of the gall-bladder is smooth and of a green colour, and appears every where perforated by the ducts of small follicles, which afford a mucus to defend the inner coat.

427. Q. Of what kind of structure is the outer surface of the peritonaeum?

A. The outer surface of the peritonaeum is cellular.

428. Q. What is the extent of the peritonaeum covering the bladder?

A. The peritoneal coat extends over the fundus, sides, and back part, to near the termination of the ureters.

429. Q. Where is the spleen situated?

A. It is situated in the left hypochondrium, near the fundus of the stomach, under the ribs.

430. Q. What nerves supply the spleen?

A. The nerves of the spleen are branches of the great sympathetic and eighth pair.

431. Q. Where is the pancreas situated?

A. The pancreas extends from the fissure of the spleen across the spine, under the posterior surface of the stomach, and terminates at the duodenum.

432. Q. What arteries nourish the pancreas?

A. The arteries which nourish the pancreas are derived from the pylorica, duodenalis, and splenica.

433. Q. What is the elongation of process sent down from the right extremity of the pancreas called?

A. This process was called by Winslow, pancreas minus: it is also called head of the pancreas.

434. Q. Where is the pancreatic duct situated?

A. The pancreatic duct begins near the left extremity of the pancreas; it runs in the substance of the gland, and terminates obliquely in the duodenum, along with the ductus communis choledochus.

435. Q. What are the supra-renal capsules?

A. The supra-renal capsules are flat bodies, of a dark yellow colour; they rest upon the kidneys; they contain a dark-colored fluid, and are larger in the foetus than in the adult.

436. Q. What difference in situation is there between the right and left kidney?

A. The right kidney is much lower than the left, occasioned by the liver occupying so much space.

437. Q. What is the excretory duct of the kidney called ?

A. The ureter.

438. Q. How many coats compose the ureter ?

A. Three : an external, consisting of a compact filamentary substance : the middle one of several fibres ; and the internal one, of the mucous kind.

439. Q. What does the substance of the kidney consist of ?

A. The substance of the kidney consists of an outer part called cortical, and an inner, termed medullary.

440. Q. What viscera are in contact with the right kidney ?

A. The right kidney lies under the liver, and is very near to the duodenum.

441. Q. Is the cortical substance endowed with any peculiar function ?

A. Yes : that of secreting the urine.

442. Q. What forms the papillae of the kidney ?

A. The terminations of the medullary substance with the uriniferous tubes.

443. Q. What is the name of the duct leading from the pelvis of the kidney to the bladder ?

A. The ureter.

444. Q. Describe the stomach ?

A. The stomach is a membranous receptacle, placed in the left hypochondriac region, composed of three membranes. It has a superior orifice called cardia, and an inferior orifice called pylorus ; a lesser and greater curvature, and two surfaces distinguished into anterior and posterior.

445. Q. Where do the veins of the stomach go ?

A. The gastric veins empty themselves into the vena portae.

446. Q. What are the arteries of the stomach ?

A. The arteries of the stomach are derived from the cœliac ; they consist of the coronaria, the gastrica sinistra, the gastrica dextra, and the pylorica.

447. Q. What viscera are attached to the great curvature of the stomach ?

A. The large omentum, the spleen, and transverse arch of the colon.

448. Q. What is the proper juice of the stomach called ?

A. The gastric juice.

449. Q. What is the beginning of the colon called ?

A. The commencement of the colon is called caput coli.

450. Q. How would you distinguish the small from the large intestines ?

A. The large intestines have three longitudinal bands, running on their surface ; they are lobulated, and have the portions of fat

adhering to them, called *appendiculæ epiploicæ*; which circumstances are not noticed in the small intestines. There are the *valvulae conniventes* in the small intestines, which do not exist in the large.

451. Q. Which is the broadest of the small intestines?

A. The duodenum is the broadest of the small intestines.

452. Q. How are the mucous glands of the intestines distinguished?

A. The mucous glands of the intestines are distinguished into solitary and congregate, and form their descriptors *gladulae Peyerii* and *gladulae Bruneri*.

453. Q. What are the ducts that enter the duodenum?

A. The *ductus communis choledochus*, and the *ductus pancreaticus*.

454. Q. By what means does the cavity of the omentum communicate with that of the abdomen?

A. A communication is formed under the capsule of Glysson by means of the foramen of Winslow.

455. Q. In what intestines are the *valvulae conniventes* found?

A. In the small, chiefly in the duodenum and jejunum.

456. Q. Describe the situation and course of the colon?

A. The colon ascends on the right side to the liver; passes under the liver and stomach to the left side, where it descends, by a sigmoid flexure, into the pelvis; and ends in the rectum.

457. Q. Where do the mouths of the lacteals open?

A. Upon the internal surface of the small intestines.

458. Q. Where does the mesentery begin?

A. Near the termination of the duodenum.

459. Q. How does the rectum differ from the colon?

A. The rectum differs from the colon in being covered only anteriorly and laterally by the peritonaeum; its muscular fibres are stronger and thicker, and spread uniformly over the intestine.

460. Q. Describe the uterus?

A. The uterus is a spongy hollow receptacle, of a pear shape, placed in the pelvis between the urinary bladder and rectum, divided into fundus, cervix, and orifice or *os tincae*: it has four ligaments, two Fallopian tubes, two ovaria, and the vagina hanging from its cervix.

460. Q. Of what do the *ligamenta lata uteri* consist?

A. The *ligamenta lata* consist of two membranous productions or doublings of the peritonaeum, which go from the sides of the uterus and vagina, to be affixed to the sides of the pelvis.

461. Q. What are the *ligamenta rotunda uteri*?

A. They are cords composed of vessels and ligamentous fibres, arising from the corners of the uterus.

462. Q. Through what tube does the ovum pass from the ovary into the uterus?

A. Through the Fallopian tube.

463. Q. Where is the os tincae situated?

A. The os tincae, or mouth of the womb is situated at the top of the vagina and inferior part of the uterus.

464. Q. What part of the vagina is covered by the peritonaeum?

A. The upper and posterior part.

465. Q. What is the length of the urethra in females?

A. The urethra in females is about an inch in length.

466. Q. Where is the female urethra situated?

A. The female urethra is situated under the symphysis of the pubis, between the nymphae and below the clitoris, just above the entrance of the vagina.

467. Q. Where is the bladder situated?

A. The bladder is situated within the pelvis, immediately behind the ossa pubis: in males before the rectum, and in females between the uterus and pubes.

468. Q. On which side of the vesiculae seminales do the ureters enter into the bladder?

A. The ureters perforate the bladder on the outside of the vesiculae seminales.

469. Q. What muscles does the ureter pass in going to the bladder?

A. The ureter descends from the kidney over the psoas muscle.

470. Q. Where is the epididymis situated?

A. The epididymis is situated at the outer and back part of the testicle.

471. Q. How many dilatations are there in the urethra?

A. There are generally three dilatations to be found in the urethra of men; one at the point of the glans penis, another at the bulb of the urethra, and a third in the prostate gland.

472. Q. To what do the openings of the verumontanum belong?

A. The orifices found on the verumontanum belong to the vesiculae seminales.

473. Q. Where is the urethra most dilated?

A. The urethra is most dilated at that part which is surrounded by the prostate gland.

474. Q. What forms the corpus pampiniforme?

A. The corpus pampiniforme is formed by a plexus of veins that have a distant resemblance to the shoots of the vine.

475. Q. What forms the coni vasculosi?

A. The coni vasculosi are formed by the vasa efferentia becoming convoluted into conical bundles.

476. Q. What does the corpus spongiosum urethrae consist of?

A. The corpus spongiosum urethrae consists of a plexus of veins; it is expanded at its anterior part to form the glans penis.

477. Q. Describe the situation and course of the corpora cavernosa penis.

A. The corpora cavernosa arise by what are called the crura from the tubera ischii; they ascend along the ischium and pubes, and are united immediately before the cartilaginous arch of the pubes: they are covered by a ligamento-tendinous substance, which is very elastic: internally they are cavernous, and are separated from each other by the septum pectiniforme, so called from its numerous perforations.

478. Q. Where are the testicles situated in the foetus?

A. The testicles in the foetus before the sixth month are in the abdomen; they receive a covering of peritoneum, and are placed at the lower part of the kidneys.

479. Q. How many coats has the testicle?

A. It has two coats; viz. the tunica vaginalis and the tunica albuginea.

480. Q. Is there any difference in the manner in which the two coats surround the testicle?

A. Yes: the tunica vaginalis invests the testicle as the pericardium does the heart, adhering only at its posterior and superior part; while the tunica albuginea surrounds and is firmly attached to the testicle on every part.

481. Q. What is the excretory duct of the testicle called?

A. The excretory duct of the testicle is called vas deferens.

482. Q. Where do the corpora cavernosa penis arise?

A. The corpora cavernosa penis arise from the edge of the ramus of the ischium and os pubis.

483. Q. What forms the scrotum?

A. The scrotum is formed by a continuation of the common integuments.

484. Q. What forms the common integuments?

A. The common integuments are formed by the cuticle, rete mucosum, cutis, and adipose substance.

485. Q. What is the use of the cartilages of the surfaces of joints?

A. The uses of the articular cartilages are to give the bones a smoothness for easy motion, to assist motion by their elasticity, and to guard against the effects of concussion.

486. Q. What is the most elastic substance in the body?

A. The most elastic substance in the body is cartilage.

487. Q. Are tendons elastic?

A. Tendons are not elastic; for, if they were, the power of muscles would be greatly diminished.

488. Q. What is the use of the adeps?

A. The adeps guards against the effects of pressure, it lessens the specific gravity of the body, fills up the interstices of muscles, and is a reservoir for nourishment to the body.

PHYSIOLOGY.

1. Q. WHAT is the course of the circulation ?

A. The blood is received from the arteries by the veins, and is returned by the superior and inferior cava to the right auricle of the heart, which, becoming distended, contracts and empties its blood into the right ventricle. The right ventricle then contracts and propels the blood through the pulmonary artery into the lungs, there to undergo a peculiar change, and to be conveyed by the four pulmonary veins into the left auricle. The left auricle being distended, evacuates its blood into the left ventricle. The left ventricle propels the blood through the aorta, to be circulated by the arteries, and again to be returned by the veins to the heart.

2. Q. What is the use of the tuberculum Loweri ?

A. The use of the tuberculum Loweri is supposed to be that of preventing the blood of the one cava from rushing upon that of the other, and to direct it into the auricle.

3. Q. How is the blood prevented from returning back into the right auricle after it has got into the right ventricle ?

A. It is prevented from returning by a valve called tricuspid, which is placed within the ventricle.

4. Q. What prevents the reflux of blood into the left auricle of the heart ?

A. The blood is prevented from going back into the auricle from the left ventricle, by the valvula mitralis.

5. Q. How do you distinguish venal from arterial blood ?

Venal blood is of a dark colour (excepting that which is in the venal system of the lungs.) Arterial blood is of a florid red vermilion hue (excepting the blood of the pulmonary artery, which is dark.)

6. Q. What is the contraction of the heart called ?

A. Systole.

7. Q. In what viscus does the change from arterial to venal blood take place ?

A. In the lungs.

8. Q. What is the colour of the blood in the pulmonary artery ?

A. It is of a dark colour, like venous blood.

9. Q. What is meant by digestion ?

A. A function by which the food introduced into the stomach of animals, is subjected to a peculiar action, and a new compound formed, fitted to their nourishment and growth.

10. Q. What are the effects of protracted abstinence ?

A. A wasting and diminution of weight of the body from the loss of fat ; discoloration of the fluids, particularly the blood ; ex-

cessive sensibility, sleeplessness, with painful sensations in the epigastric region.

11. Q. What is the chief agent in digestion?

A. The gastric juice.

12. Q. What is the use of the sphincter pylori?

A. The sphincter pylori, by contracting, prevents the grosser indigested parts of the aliment from escaping, and by dilating, allows the digested pulp to pass into the duodenum.

13. Q. What is the use of the mesentery?

A. The use of the mesentery is to suspend and retain the intestines in their places, to furnish them with an external coat, and to form a bed for their glands, vessels, and nerves.

14. Q. What is the cause of the bile regurgitating into the gall-bladder.

A. When digestion is not going on, the opening of the ductus communis choledochus is shut; the bile therefore, not finding an access to the duodenum, regurgitates into the gall-bladder.

15. Q. What is the use of the urinary bladder?

A. To receive, to retain for a certain time, and to expel, the urine.

16. Q. What is the use of the gastric juice?

A. To digest the food.

17. Q. What is the theory of ossification?

A. First, the formation of a jelly; this becoming cartilage, the absorbents remove a portion of the cartilage, forming a cavity, and the arteries next deposit the osseous matter in the cavity: it is, however, not always cartilage that the bony matter is deposited in; for, in most of the flat bones, the deposition takes place between membranes.

18. Q. How is inspiration performed?

A. The intercostal muscles contract, assisted by other muscles, and increase the transverse breadth of the cavity of the chest, whilst the diaphragm contracts, and increases the length of the cavity of the chest; the air then rushes down the trachea, and inspiration is performed.

19. Q. When the chest of an adult dilates, what quantity of atmospherical air does he take in?

A. The quantity of air inspired by an adult at each period, is between thirty and forty cubic inches of atmospherical air.

20. Q. What changes has the air undergone which has been expired from the lungs?

A. It differs from the air previous to inspiration in being diminished in quantity, in having its carbonic acid considerably increased, and by being loaded with aqueous vapour, besides at times containing hydrogen.

21. Q. What is meant by secretion?

A. The formation of a solid fluid different from the blood, from the minute ends of the arteries.

22. Q. What change is produced on the blood in the lungs?

A. The blood is changed from a dark colour to a florid red ; it is deprived of hydrogen and carbon, and absorbs oxygen, caloric, and a portion of nitrogen.

23. Q. What is the use of the palatum molle ?

A. The palatum molle acts like a valve, in preventing what we swallow from passing into the nose, and conducts the fluids of the nose into the mouth.

24. Q. What prevents the faeces from returning from the large intestines into the small ?

A. The valvuli coli, placed at the beginning of the colon, allows the contents of the ileum to pass into the large intestines, but completely prevents their return.

25. Q. What causes the bile to pass from the gall-bladder into the duodenum ?

A. The bile is discharged from the gall-bladder, when the stomach is full, chiefly by the pressure of the surrounding viscera, and by the contractile power of the gall-bladder.

26. Q. What is the use of the bile ?

A. The use of the bile is to excite the peristaltic motion of the intestines, to correct too great a disposition to acidity, and to assist in chylification.

27. Q. What is the use of the pancreatic juice ?

A. The pancreatic juice is said to incorporate the bile with the alimentary mass, and to answer the same purposes.

28. Q. How is the urine expelled ?

A. The urine is expelled partly by the contraction of the bladder itself, and partly by the action of the abdominal muscles and diaphragm, which press the intestines against the bladder.

29. Q. What is the use of the tunica vaginalis testis ?

A. The use of the tunica vaginalis is to enclose the testicle, and to assist the cremaster in supporting the testicle ; it also exhales a fluid, which lubricates the surface of the testicle.

30. Q. What are the powers engaged in expelling the faeces ?

A. The powers engaged in expelling the faeces are, the muscular coat of the rectum, the levator ani, assisted by the action of the diaphragmatic and abdominal muscles.

31. Q. How is expiration performed ?

A. By the relaxation of the intercostal muscles and diaphragm, and the thorax assuming its relaxed state.

32. Q. What is meant by animal heat ?

A. The natural heat of an animal, which, in the human being, raises the mercury in Fahrenheit's thermometer to about 95°.

33. Q. Why does not the fluid exhaled to lubricate the different cavities of the body accumulate ?

A. Because in a healthy state the inhalants or absorbents counterbalance the exhalants or secreting arteries.

34. How is nutrition effected?

A. By the lacteals, the mouths of which open upon the internal surface of the small intestines, selecting the chyle from the excrementitious part of the food, and conveying it into the thoracic duct, which empties itself into the angle of the jugular and subclavian vein, thereby repairing the losses the blood continually sustains in nourishing the body.

35. Q. What membrane moderates the effect of light on the retina?

A. The iris, which diminishes or enlarges the pupil, according to the intensity of the light.

36. Q. What is the use of tears?

A. They prevent the effects of friction, and save the organ of sight from being dried, at the part which is exposed to the air.

37. Q. What is the use of the fluid which fills the labyrinth of the ear?

A. It preserves the nervous fibrils soft, and moderates the tremors of sound.

38. Q. Why does not the fat gravitate to the lower extremities after long standing, like the fluid of an anasarca person?

A. Because the fat is contained in vesicles which do not communicate like the cells of the cellular membrane.

39. Q. What is the use of the omentum?

A. The use of the omentum is supposed to be that of lubricating the viscera, and to prevent them from being injured by friction.

40. Q. How does the ovum get from the ovarium into the uterus?

A. The ovum, when impregnated, escapes from the ovarium through the Fallopian tube, which is grasping the ovarium at the time.

41. Q. What is the use of the prostate gland?

A. The use of the prostate gland is not well known; it affords a fluid, which is supposed to be of use in generation.

42. Why does not the urine excite inflammation of the bladder?

A. Because the bladder is accustomed to its stimulus, and a great quantity of mucus is secreted by the internal membrane to defend it from the acrimony of the urine.

43. Q. Why do enlarged mesentric glands cause an atrophy?

A. Because they obstruct the passage of the chyle through the lacteals to the thoracic duct.

44. Q. In what ages and sex is the pulse the most frequent?

A. In children and women the pulse is most frequent.

45. Q. What is the use of the anastomoses of arteries?

A. The use of arteries anastomosing is to allow of blood being conveyed to parts where its passage is prevented in the principal branch or branches that supply those parts with blood: another use is that of facilitating the passage of blood from one part to another, and prevent the distention of parts.

46. Q. Is the fat solid or fluid in the living body?

A. The fat in a living body is found in some parts in a state of semifluidity, and in other parts it is found absolutely fluid.

47. Q. What is the cause of the fainting that sometimes takes place under the operation of tapping?

A. Fainting takes place in tapping in consequence of the sudden removal of the pressure of fluid from the diaphragm and viscera.

48. Q. How does a compression of the thoracic duct, either by an aneurism of the heart or aorta, occasion so frequently a dropsy?

A. The compression of the thoracic duct prevents the lymph from the absorbent vessels being returned into the blood; the absorbents are therefore prevented performing their office, and an accumulation takes place.

49. Q. Why does a person troubled with calculus find great difficulty in passing the urine when he leans forward?

A. Because the calculus falling against the orifice of the urethra, thereby prevents the regular flow of urine.

50. Q. Why does not the urine flow back from the bladder to the kidney?

A. The urine is prevented flowing back to the pelvis of the kidney by the valve formed by the inner coat of the bladder over the orifice of the ureter, produced by the ureter's piercing the bladder obliquely.

51. Q. Why is the spine composed of so many small bones?

A. The reason why the spine is composed of so many bones is to allow of great strength, with a sufficient degree of mobility.

52. Q. Is there any alteration in the muscles of a paralytic limb?

A. Yes: the muscles of a paralytic limb are paler and more flaccid.

53. Q. How is the voice performed?

A. The voice results from the vibration the air suffers during its passage through the glottis, when expelled from the lungs.

54. Q. Which of the two has the greatest power in preventing luxations of the joint, the muscles that surround the joint, or its own ligaments?

A. The muscles that surround joints defend them better and give them greater strength than their surrounding ligaments.

PRACTICE OF PHYSIC.

1. Q. How many classes are there in the Cullenian arrangement of diseases ?

A. There are four classes ; viz. pyrexiae—neuroses—cachexiae—locales.

2. Q. How many orders are there in the class pyrexiae ?

A. There are five ; viz. febres—phlegmasiae—exanthemata—haemorrhagiae—profluvia.

3. Q. What are the divisions and genera in the order febres ?

A. There are two divisions in the order febres ; viz. intermittents and continued fevers. The genera of the intermittents are, quotidian—tertiana—quartana. Those of the other division are, synocha—typhus—synochus.

4. Q. What are the stages that each paroxysm of an intermittent is characterized by ?

A. The fits or paroxysms are marked by three different stages, which are called the cold, the hot, and the sweating stages.

5. Q. What is considered to be the exciting cause of an intermittent ?

A. The effluvia arising from stagnant waters, or marshy ground, when acted upon by heat, called marsh miasmata.

6. Q. Are agues influenced by the time of year ?

A. Yes : the tertian ague is most apt to prevail in the spring, and the quartan in autumn.

7. A. What quantity of cinchona should be given during the intervals in the different species of agues ?

A. In a quotidian, an ounce, at least, should be given between the fits ; in a tertian, half as much more ; and in a quartan, two ounces.

8. Q. What is meant by synocha ?

A. Inflammatory fever ; a species of continued fever, characterized by increased heat, a frequent hard pulsh, urine high-coloured, and senses not impaired.

9. Q. Is synocha often met with in large towns ?

A. No : it is prevalent in the country ; but is more particularly the disease of cold climates.

10. Q. What is the indication of cure in synocha ?

A. To lessen the excessive vascular action, by evacuations, and the antiphlogistic regimen.

11. Q. What disease is formed by a combination of the symptoms of synocha and typhus ?

A. Mixed fever, or synochus.

12. Q. What are the genera of the order phlegmasiae ?

A. There are eighteen genera in this order; viz. phlogosis—ophthalmia—phrenitis—cynanche—pneumonia—carditis—peritonitis—gastritis—enteritis—hepatitis—splenitis—nephritis—cystitis—hysteritis—rheumatismus—odontalgia—podagra—arthropuosis.

13. Q. What are the eruptive fevers in the order exanthemata ?

A. There are ten genera of eruptive diseases in the order exanthemata; viz. variola—varicella—rubeola—scarlatina—pestis—erysipelas—miliaria—urticaria—pemphigus—aphthae.

14. Q. How many genera has the order haemorrhagia.

A. There are five genera in this order; viz. epistaxis—haematemesis—haemorrhoids—menorrhagia.

15. Q. What diseases belong to the order profluvia ?

A. Catarrhus and dysentery.

16. Q. How many orders are there in the class neuroses ?

A. Four: comata—adynamiae—spasmi—vesaniae.

17. Q. What genera belong to the order comata ?

A. There are only two in this order, viz. apoplexia and paralysis.

18. Q. What are the diseases belonging to the order adynamiae ?

A. Syncope—dyspepsia—hypochondriasis—chlorosis.

19. Q. What diseases belong to the order spasmi ?

A. Tetanus—trismus—convulsio—chorea—raphania—epilepsia—palpitatio—asthma—dyspnoea—pertussis—pyrosis—colica—cholera—diarrhoea—diabetes—hysteria—hydrophobia; making seventeen in all.

20. Q. How many genera are there in the order vesaniae ?

A. There are four genera in this order; viz. amentia—melancholia—mania—oncirodyia.

21. Q. How many orders has the class cachexiae ?

A. Three; viz. marcores—intumescenciae—impetigines.

22. Q. What genera belong to marcores ?

A. The genera of marcores are tabes and atrophica.

23. Q. What diseases belong to the order intumescenciae ?

A. There are thirteen diseases that belong to this order; viz. polysarcia—pneumatosis—tympañites—physometra—anasarca—hydrocephalus—hydrorachitis—hydrothorax—ascites—hydrometra—hydrocele—physionia—rachitis.

24. Q. What are the genera in the order impetigines ?

A. They are: scrofula—syphilis—scorbutus—elephantiasis—lepra—frambesia—trichoma—icterus.

25. Q. What are the orders of the class locales ?

A. Locales comprehends eight orders: dysaesthesia—dysorexiae—dyscinesiae—apocenoscs—epischescs—tumores—ectopiac—diagnosis.

26. Q. What do you understand by inflammation?

A. By inflammation is understood that state of a part in which it is painful, hotter, redder, and more turgid than it naturally is. These local symptoms, when present in any great degree, or when they affect very sensible parts, are attended with fever.

27. Q. How many kinds of inflammation are there?

A. There are two kinds of inflammation; viz. the phlegmonoid and the erysipelatous; each of which is divided into the acute or active, and the chronic or passive.

28. Q. How do you distinguish phlegmonoid from erysipelatous inflammation?

A. Phlegmonoid inflammation may be distinguished by the tumefaction being circumscribed, and not diffused, as in erysipelatous inflammation. The redness of phlegmon does not disappear on pressure, as in erysipelas; nor is the sense of throbbing and darting pain so observable in erysipelas as in phlegmon.

29. Q. How would you distinguish chronic from acute inflammation?

A. Chronic inflammation may be distinguished from acute by its long continuance, the want of activity in the symptoms, and by the fever having abated, or assumed a new type.

30. Q. What treatment does active inflammation require?

A. Active inflammation requires powerful antiphlogistic measures; as blood-letting, purging, diaphoretics, and a low diet.

31. Q. Does active erysipelas give way to the same plan?

A. Active erysipelas in the country generally gives way to the same kind of treatment; but the erysipelas of large towns, being accompanied by typhus fever, soon requires bark, acids, wine, &c.

32. Q. What is the proper regimen and diet of inflammatory diseases called?

A. The proper regimen and diet of inflammatory diseases is called antiphlogistic.

33. Q. What foods and drink do you consider antiphlogistic?

A. the foods and drink which may be considered as antiphlogistic are, all kinds of vegetables, especially the farinaceous, light puddings, barley-water, toast and water, &c.

34. Q. Which are the antiphlogistic purgatives?

A. The best are those which are refrigeratory, such as the sulphate of soda, the sulphate of magnesia, the sulphate of potass, and the tartrate of potass.

35. Q. What is meant by inflammatory diathesis?

A. By inflammatory diathesis is meant a state of body that favors and attends inflammatory diseases, such as a redundancy of blood, an increased action of the heart and arteries, a fulness of habit, &c.

36. Q. What kind of urine is made when active inflammation exists?

A. When active inflammation exists, the urine voided is of a high color; and when allowed to stand, deposits the lateritious or brickdust-like sediment.

37. Q. What is the composition of the lateritious sediment?

A. The lateritious sediment is found to consist of uric acid, with phosphate of lime.

38. Q. What character has the pulse when inflammation is going on?

A. The pulse, when inflammation is going on, is frequent, strong, and hard.

39. Q. What kind of delirium is most frequent in typhus fevers?

A. The delirium most frequent in typhus is not of the violent kind, and is marked by low muttering, accompanied with stupidity.

40. Q. Is bleeding recommended in the cure of typhoid fevers?

A. Bleeding is not recommended in typhus fevers, because it would weaken the energy of the powers necessary to life, the actions of which are already weaker than they ought to be.

41. Q. How many species of typhus fevers are there?

A. There are four species of typhus fevers; 1st, typhus nervosus, or nervous fever; 2d, typhus mitior, the low fever, or mild form of typhus; 3d, the typhus gravior, the severe species of typhus fever, or putrid fever; 4th, the typhus icterodes, or typhus with symptoms of jaundice.

42. Q. What is the most common cause of typhus fevers?

A. Contagion, a poison generated from putrid animal and vegetable substances; by the human body under the disease; by confined animal secretions, and other sources?

43. Q. What kind of a pulse have you in enteritis?

A. In inflammation of the intestines, or enteritis, the pulse is often peculiarly small and feeble.

44. Q. What are the symptoms of gastritis?

A. Pain in the epigastric region increased under pressure, frequent vomiting, particularly when any thing is taken into the stomach, occasionally hiccup, and a small and frequent pulse.

45. Q. How may inflammation of the trachea terminate?

A. It may terminate in suppuration, but more frequently it ends either in resolution or by the formation of coagulable lymph, so as to cause suffocation in many instances.

46. Q. What are the symptoms of trismus?

A. When trismus comes on gradually, the symptoms are—a slight stiffness is at first perceived at the back part of the neck, which, after a short time, becomes considerably increased, and at length renders the motion of the head both difficult and painful. With the rigidity of the head, there is likewise an uneasy sensation

at the root of the tongue, together with some difficulty in swallowing; and a great tightness is perceived about the chest, with a pain at the sternum, shooting into the back; a stiffness next takes place about the jaws, which increases to such a height, that the teeth become closed together, and the disease trismus or locked-jaw is formed.

47. Q. To what diseases are muscles subject?

A. Muscles are subject to morbid contraction, which may be either spasmodic, or permanent; they are liable to inflammation, to have abscesses form in them, to become gangrenous, to become flaccid, to be diminished in bulk, to have bony matter deposited in their substance, and to rheumatism.

48. Q. What is a cramp or spasm?

A. A spasm or cramp is an involuntary contraction of the muscular fibres, or that state of the contraction of muscles, which is not spontaneously disposed to alternate with relaxation.

49. Q. How many species of scarlatina are there?

A. Three: 1. scarlatina simplex; 2. scarlatina anginosa; and 3. scarlatina maligna.

50. Q. Is it proper to use cold ablution in rubeola?

A. No: if the eruption be repelled by cold, delirium, dyspnoea or diarrhoea occurs, attended with considerable danger.

51. Q. On what day of the fever does the eruption of measles appear?

A. Generally on the fourth day.

52. Q. How many species of variola are there?

A. Two; viz. variola discreta, and variola confluens.

53. Q. What kind of fever attends confluent small-pox?

A. Typhoid or malignant fever.

54. Q. After varicella has existed for four days, can you distinguish it from variola?

A. Yes; at this period you have often vesicles, pustules, and incrustations or scabs existing together, which distinguish its eruption from the firm and durable pustules of small pox.

55. Q. What kind of habits are most liable to haemoptysis?

A. Persons of a sanguineous temperament; and more frequently perhaps men than women.

56. Q. What is the color of the blood usually coughed up in the haemoptysis?

A. Generally a florid color.

57. Q. What is the appearance of the blood brought up in haematemesis?

A. It is dark-colored or black, generally fluid, and often mixed with portions of food; sometimes it has the appearance of coffee grounds.

58. Q. What fever accompanies phthisis?

A. Hectic fever.

59. Q. What may be expected to take place in consequence of apoplexy not being cured?

A. If apoplexy is not removed entirely, it often leaves a state of mental imbecility behind, or terminates in hemiplegia or death.

60. Q. What persons are most subject to the serous form of apoplexy?

A. Those of a phlegmatic habit of body.

61. Q. What are the indications of cure in dyspepsia?

A. There are three indications of cure in dyspepsia: 1. to obviate the several exciting causes; 2. to relieve urgent symptoms; and 3. to restore the tone of the stomach, or the general system.

62. Q. How is dropsy distinguished according to the situation of the fluid?

A. When it is diffused through the cellular membrane it is called anasarca; when it is deposited in the cavity of the cranium, it is termed hydrocephalus; when in the chest, hydrothorax; when in the abdomen, ascites; in the uterus, hydrometra; and within the tunica vaginalis, hydrocele.

63. Q. How would you form a prognosis in vertigo?

A. When it arises as a symptom of hysteria or any other nervous disease, it is not attended with danger; but when it takes place in consequence of an overfulness of blood in the head, it becomes dangerous, as it may lead to apoplexy or palsy.

65. Q. What is the office of the liver?

A. The office of the liver is to supply a fluid called bile to the intestines, which is of the utmost importance in chyfication:

66. Q. What are the characters of healthy bile?

A. Healthy bile is of a yellow-green color, of a plastic consistence, like thin oil, and when very much agitated it froths like soap and water; its smell is somewhat like musk, and its taste is bitter.

67. Q. What are its uses?

A. The uses of bile are, 1st, to extricate the chyle from the chyme; 2d, by its stimulus it excites the action of the intestines; 3d, it imparts a yellow color to the faeces; 4th, it prevents the abundance of mucus, and acidity in the primæ viæ.

68. Q. Does bile ever get into the blood?

A. Yes: bile gets into the blood when its regular course is interrupted, as in jaundice, diseased liver, &c.

69. Q. How does it get into it?

A. Bile gets into the blood through the medium of the absorbents, which remove it from the bile-ducts that are preternaturally distended, and convey it into the blood by means of the thoracic duct.

70. Q. What is the most common way in which the bile is prevented passing, as it ought to do, out of its ducts into the duodenum?

A. The most common way in which bile is prevented passing through its ducts into the duodenum, is from an obstruction in the ductus communis choledochus.

71. Q. In what way may the ductus communis choledochus be obstructed?

A. The ductus communis may be obstructed by spasm, by a calculus, by mucus from the duodenum, and by the pressure of adjacent tumors.

72. Q. How do you know when the bile is vitiated or unhealthy?

A. The stomach does not perform its function properly, the intestines are irritated, and the fæces are not of their healthy color.

73. Q. Does a vitiated bile influence the formation of the blood?

A. Yes:—vitiated bile impairs digestion: the chyle is not properly separated from the chyme, or that which is separated is of a diseased quality; and when formed into blood, the blood is of an unhealthy nature, and improper for nutrition.

74. Q. What are the unhealthy appearances of the blood that you are acquainted with?

A. The unhealthy appearances of the blood that are usually met with are, an excess of crassamentum, an excess of coagulable lymph in the crassamentum, which shows itself by the white coriaceous crust on the surface; a loose flabby cruor; an excess of serum; a yellow serum.

75. Q. When too much coagulable lymph exists in the cruor, how does it affect the solids?

A. When there is too much coagulable lymph in the cruor, the solids are firmer than they should be, and there is a predisposition in the system to inflammatory diseases.

76. Q. When the crassamentum is loose, and the serum in excess, how are the solids influenced?

A. The solids are loose and flabby, and there is a tendency to dropsy?

77. Q. What do you understand by excitement?

A. Excitement is the property by which animals may be affected by external agents, as well as by certain powers peculiar to themselves, in such a manner, that the phenomena peculiar to the living state can be produced.

78. Q. In the commencement of fevers, when there is no diminution of vital energy, what means are the most likely to stop their progress?

A. The means most likely to stop their progress, under such circumstances, are, an emetic, combined with a cathartic and blood-letting.

79. Q. What are the most proper remedies to check febrile ac-

tion at the very commencement, when there is an evident diminution of vital power ?

A. When there is an evident diminution of vital power at the commencement of febrile action, a cordial diaphoretic, as the compound powder of ipecacuanha, spirit of sulphuric and nitric ether, are found the most successful.

80. Q. What do you mean by tetanus?

A. It is a rigid spasm of several muscles of the body.

81. Q. How would you treat inflammation of the bowels ?

A. By general and topical blood-letting, by the warm bath and fomentations, by the frequent exhibitions of purges, and by giving saline diaphoretics with mucilaginous drinks.

82. Q. What is a dysentery?

A. It is a spasmodic constriction of the colon, with a retention of the natural faeces, and the frequent expulsion of mucous or sanguineous motions.

83. Q. What are the symptoms of enteritis ?

A. Fever, costiveness, a twisting around the umbilicus, tension and acute pain of the abdomen, increased pain upon pressure, tenesmus or vomiting, according to the seat of the inflammation: quick, or slow, and hard, contracted pulse; great prostration of strength, and high colored urine.

84. Q. What are the symptoms of volvulus ?

A. Violent pain and distention of the abdomen, attended with a peculiar twisting around the naval, obstinate costiveness, slight febrile symptoms, and a frequent vomiting of a stercoraceous matter.

85. Q. What are the symptoms of nephritis ?

A. Pyrexia, pain in the region of the kidney, extending along the course of the ureter, accompanied with numbness of the leg and thigh of the affected side, nausea and vomiting, retraction of the testicle, high-colored urine, sometimes mucous or bloody, frequent micturition, dysuria.

86. Q. How would you distinguish hepatitis from gastritis ?

A. From gastritis by the seat of the pain, by the sympathetic pains of the clavicle and shoulder, by the less prostration of strength, and greater fulness of the pulse, by the colour of the stools and urine.

87. Q. What purges would you give in nephritis ?

A. Oleaginous purges and frequent emollient clysters.

88. Q. What are the symptoms of pneumonia ?

A. Obtuse pain and sense of weight and oppression in the chest; anxious breathing, and the pain is increased during inspiration; hard, contracted, and frequent pulse; the face is usually flushed, and of a purple hue; the tongue is white, the urine is high-colored, and there are other symptoms of synocha.

89. Q. How would you distinguish cystitis from enteritis ?

A. From enteritis by the seat of the pain; the tension and tumour, which is above the pubes in cystitis; by the micturition, and by the painful discharge of urine in small quantities, or the complete obstruction to its passage.

90. Q. When gangrene takes place in internal parts, what are the symptoms?

A. A peculiar appearance of the countenance; cold perspirations; coldness of the extremities; sudden cessation of pain; hiccup; subsultus tendinum; suppression of urine; convulsions, and the pulse scarcely perceptible.

91. Q. What are the symptoms of hydrocephalus?

A. Languor, inactivity, loss of appetite, nausea, vomiting, parched tongue, dry skin, flushing of the face, and other symptoms pyrexia; pain over the eyes; the pain in the head becomes extremely acute, and intermits, occasioning the patient to scream violently; disturbed sleep, extreme restlessness, flushed countenance, costiveness, vomiting, stupor, convulsions, dilated pupils.

92. Q. What is a typhus fever?

A. A very infectious fever, characterized by great debility, disturbed animal functions, languid circulation, furred tongue, aching pains in different parts of body, particularly the head and small of the back, and the evacuated fluids of the body undergoing speedy putrefaction.

93. Q. What are the indications of cure in a typhus fever?

A. To excite a new action in the system, by rousing that of the brain and arteries; to support the strength of the patient; and to obviate the putrid tendency in the fluids.

94. Q. What is the best way of destroying the fetid smell of sick wards?

A. By extricating nitrous fumes from a mixture of nitre and sulphuric acid placed in hot sand.

95. Q. What is meant by scrofula?

A. A peculiar disease affecting people of a particular habit of body, and usually the glandular parts, causing them to swell.

96. Q. What is the best way of relieving inflammatory affections?

A. By bleeding either locally or generally, by blisters, exhibiting cathartics, diaphoretics, and a low diet.

97. Q. How is the colic distinguished from enteritis?

A. The colic is distinguished from enteritis by the peculiar twisting and occasional pain; by the absence of fever in the early part of the disease; by the pain in enteritis being increased, in colic alleviated, by pressure; by the irregular contraction of the abdominal muscles.

98. Q. How is a diarrhœa distinguished from dysentery?

A. Diarrhœa is distinguished from dysentery by being untended either with fever, inflammation, contagion, or tenesmus; by the appearance of the matter evacuated, which in one disease is

feculent or mixed with alimentary matter, in the other mucal, sanguineous, or putrid.

99. Q. How many species of diabetes are there?

A. There are two species of diabetes, viz. diabetes mellitus, and the diabetes insipidus.

100. Q. How is mania distinguished from phrenitis?

A. Mania is distinguished from phrenitis by the former being without fever, which the latter never is.

101. Q. What is meant by anasarca?

A. Anasarca is a preternatural collection of serum or watery fluid in the cellular membrane of the whole or part of the body.

102. Q. What are the indications in the cure of scurvy?

A. The indications in the cure of scurvy are; 1st, to correct the septic tendency of the fluids; 2d, to palliate urgent symptoms; 3d, to restore the tone of the solids.

103. Q. What are the species of tympanites?

A. There are two species of tympanites, viz. tympanites abdominalis, or collection of air in the cavity of the peritonaeum; and tympanites intestinalis, or collection of air in the cavity of the intestines.

104. Q. What are Dr. Cullen's species of paralysis?

A. His species of paralysis are; 1st, paralysis partialis, or palsy of a certain muscle or set of muscles; 2d, paralysis hemiplegica, or a total palsy of one side of the body; 3d, paralysis paraplegica, or a palsy of one half the body taken transversely; 4th, paralysis venenate, or palsy from poisons.

105. Q. How many species of catarrh are there?

A. Two, viz. catarrhus a frigore, or common cold, and catarrhus contagiosus, or the influenza.

106. Q. What are the species of apoplexy?

A. There are several; but the most useful distinction is into the sanguineous and the serous.

107. Q. What are the indications of cure in dropsy?

A. To evacuate the fluid, and to prevent a second accumulation.

108. Q. How many species of cholera are there?

A. Two, viz. cholera spontanea and cholera accidentalis.

109. Q. What are the species of syncope?

A. Three, viz. syncope accidentalis, syncope cardiaca, and syncope anginosa.

110. Q. What are the indications of cure in catarrh?

A. To reduce the febrile action of the system, and to allay the irritation of the affected parts.

111. Q. How is the synocha distinguished from typhus?

A. From typhus by the more sudden accession of the disease; by its arising from common causes, as sudden alterations of temperature; the application of cold to a heated body; violent exer-

cise, intemperance, &c., and not from contagion; by the strength of the body not being diminished; the hardness of the pulse; the whiteness of the tongue; and by the high color of the urine.

112. Q. How is *cynanche tonsillaris* distinguished from *cynanche maligna*?

A. By the fever, which in the former is inflammatory, in the latter typhoid, and by the absence of ulceration in *cynanche tonsillaris*.

113. Q. How is rheumatism distinguished from *podraga*?

A. By it generally attacking the larger joints; by the pain shifting its seat, and following the course of the muscles in its translation to other parts; by the disease not having been preceded by symptoms of dyspepsia; by its occurring at any period of life, whereas gout is usually confined to the adult age.

114. Q. How is *tympanites* distinguished from *ascities*?

A. By the absence of fluctuation and of those symptoms which characterize the hydrophic diathesis.

115. Q. What are the indications of treatment in intermittent fever?

A. In the first place, to evacuate thoroughly the stomach and bowels with a view of removing the cause of disease; secondly, to shorten the duration of the paroxysm; and thirdly, to prevent its recurrence.

116. Q. How is the first indication to be accomplished?

A. By emetics and purgatives.

117. Q. In what stage of the disease are emetics most proper to be given?

A. A short time before the accession of the paroxysm.

118. Q. What is the best emetic to be used?

A. Tartarized antimony and *ipecacuanha* combined.

119. Q. How is the second indication of cure to be accomplished?

A. In the cold stage, by the external application of heat and warm diluent drinks; and in the hot stage, by general antiphlogistic treatment.

120. Q. How is the third indication to be accomplished?

A. By tonics.

121. Q. What tonics are best suited to this purpose?

A. Peruvian bark; sulphate of quinine; Fowler's solution; and the vegetable bitters generally.

122. Q. What is the dose of sulphate of quinine?

A. From one to two grains.

123. Q. What is Fowler's solution?

A. It is a solution of arsenic with sub-carbonate of potash.

124. Q. What is the dose in which it is given?

A. From five to ten drops.

125. Q. Is opium ever used in intermittent fever?

A. Given a short time before the paroxysm is expected to come on, it frequently prevents its access.

126. Q. What are the symptoms of yellow fever?

A. A slight rigor succeeded by great heat, pain in the forehead and over the eye-balls; in the back and the calves of the legs; oppression and heat about the præcordia, nausea and retching. The pulse is full and quick, and sometimes natural; tongue moist with red edges; the eyes of a peculiar reddish tinge, and countenance looks depressed. After thirty-six or forty-eight hours these symptoms subside, and are soon followed by great prostration, increased nausea, vomiting of a dark flocculent matter with slate-colored sediment, great pain in epigastico, intolerable thirst, dark yellow suffusion over the face, neck, and breast; death.

127. Q. What is the usual duration of yellow fever?

A. From three to seven days.

128. Q. What is black vomit?

A. A hæmorrhage from the villous coat of the stomach.

129. Q. At what season of the year does yellow fever occur?

A. During the summer and autumn.

130. Q. What effect has frost upon the spread of yellow fever?

A. It puts a stop to it immediately.

131. Q. How is yellow fever to be treated?

A. During the first two days of the disease, if the pulse be full and hard, bleeding may be resorted to; after this purgatives; sudorifics; and blisters to the region of the stomach.

132. Q. What are the effects of emetics in yellow fever?

A. They always increase the irritability of the stomach, and thus invariably prove injurious.

133. Q. What are the symptoms of bilious remitting fever?

A. The symptoms resemble those of ordinary remittents, with the addition of great discharge of bile both upward and downward; and they are more apt to prove speedily fatal.

134. Q. What is the mode of treating it?

A. If the pulse requires it, venesection; after this emetics, succeeded by purgatives and the antiphlogistic regimen. If the fever still continue, blisters, and calomel, so as to produce ptyalism.

135. Q. In what seasons of the year does typhus fever occur?

A. At all seasons, but more especially during the autumn and winter.

136. Q. How is ophthalmia to be treated?

A. By blood-letting, general and local; active purging; blisters to the neck, and sedative lotions to the eye.

137. Q. What are the symptoms of phrenitis?

A. Acute pain in the head; eyes red and painful; face flushed; great intolerance of light and sound; general inflammatory fever, delirium, coma and death.

138. Q. What are the causes of phrenitis.

A. Injury to the brain from external violence; intoxication; great heat or cold; intense study; the suppression of habitual discharges.

139. Q. How is phrenitis to be treated?

A. Copious venesection; purging; blisters, with strictest antiphlogistic regimen.

104. Q. How does phrenitis differ from mania?

A. Mania is of longer duration, and unaccompanied by general fever.

141. Q. What are the different species of cynanche?

A. Cynanche tonsillaris—cynanche maligna—cynanche laryngaea—cynanche trachealis—cynanche parotidæa.

142. Q. What are the symptoms of cynanche maligna?

A. Tumor and redness of the fauces, ending in ulceration and sloughing of the parts. The fever accompanying it is of the typhoid character.

143. Q. Is cynanche maligna contagious?

A. It is generally believed to be so.

144. Q. How is cynanche maligna to be treated?

A. By emetics; calomel blisters to the throat; and stimulating and detergent gargles.

145. Q. What are the symptoms of cynanche laryngaea?

A. Pain about the larynx, hoarseness and slight redness about the fauces, the epiglottis frequently erected and swollen, the breathing difficult, great mental agitation, and the circulation much hurried.

146. Q. What are the causes of cynanche laryngaea?

A. Cold is the principal exciting cause.

147. Q. How is cynanche laryngaea to be treated?

A. By general antiphlogistic means.

148. Q. In what patients does cynanche laryngaea generally occur?

A. In adults.

149. Q. At what period of life does cynanche trachealis or croup occur?

A. In infants, and young persons under twelve years of age.

150. Q. What are the symptoms of croup?

A. Difficulty of breathing, pain or uneasiness in the region of the trachea; shrillness of voice, and a dry cough resembling the barking of a dog; accompanied with general febrile symptoms.

151. Q. What are the appearances on dissection in croup?

A. A preternatural membrane lining the whole of the trachea, and extending frequently into the bronchiæ.

152. Q. What are the causes of croup?

A. Cold and a variable atmosphere.

153. Q. How is croup to be treated?

A. By emetics; repeated venesection; blisters, and other anti-phlogistic remedies.

154. Q. How does Dr. Cullen define pneumonia?

A. Pyrexia, pain in some part of the thorax, dyspnœa and cough.

155. Q. Into how many species is it divided?

A. Two—peripneumony and pleurisy.

156. Q. What is the difference between peripneumony and pleurisy?

A. Peripneumony is an inflammation of the parenchymatous substance of the lungs, characterized by deep-seated pain, cough, expectoration of mucous and bloody matter; general fever. Pleurisy is an inflammation of the membrane investing the lungs; pain in the side; pulse hard and frequent; cough dry.

157. Q. What are the causes of pneumonia?

A. Cold and moist weather; violent exercise; violent coughing; acrid vapours received into the lungs; certain other diseases of the lungs, and even of the abdomen.

158. Q. What is the treatment proper in pneumonia?

A. Blood-letting, free and repeated according to the circumstances of the case; nauseating medicines, as tartar emetic; blisters, and other antiphlogistic means.

159. Q. What is a stethoscope?

A. It is an instrument by which the chest can be examined to ascertain the existence of disease in it. It is cylindrical in form, composed of wood of a light loose texture, twelve inches in length, and four and a half in circumference. It is perforated through its middle by a canal, lined with a brass tube, through which the sound is conveyed, and at the pectoral extremity it has a funnel-like excavation, which can be filled up. By applying one end of this instrument to the thorax of a patient, and the other to the ear, so that its canal will be opposite to the meatus, and causing the patient to speak, the vibration of peculiar sounds, characteristic of morbid conditions of the lungs, is rendered audible.

160. Q. What is the treatment proper in dysentery?

A. If the pulse is full and hard, and pain very urgent, blood should be drawn from the arm and leeches applied to the abdomen. Calomel should then be given, combined with rhubarb, ipecacuanha, or opium, and alternated with the use of castor oil or sulphate of magnesia, according to the symptoms which prevail. Barley water should be drank freely throughout the disease.

161. Q. How would you ascertain whether dropsy is attended by an inflammatory state of the system or not?

A. By subjecting the urine of a dropsical patient to the action of heat: if a coagulum appears in the urine, it is considered a test of inflammation, and depletory means are indicated, and vice versa.

162. Q. What treatment has been found most successful in hydrocephalus internus?

A. Before water is actually effused to any extent, the disease has been removed by large and repeated venesection, cathartics, blisters, and mercury given to the extent of inducing salivation.

163. Q. How would you treat a case of cholera morbus?

A. Diluents to be freely given at first to assist in clearing out the stomach; after this opiates and astringents, &c.

164. Q. What is the treatment proper in cholera infantum?

A. Calomel alone, or in combination with ipecacuanha, in small doses, so as to produce an alterative effect; where the bowels are too loose, opium must be interposed. In the latter stages, mild astringents and tonics may become necessary. The warm bath, together with flannel next the skin, are proper.

165. Q. To what diseases is the spleen subject?

A. To acute and chronic inflammation, and to schirrus?

166. Q. How is diabetes to be treated?

A. By the use of animal food and by tonics.

167. Q. What are the symptoms of angina pectoris?

A. an acute pain or stricture at the lower part of the sternum, great anxiety, violent palpitation of the heart, difficulty of breathing, and a sense of suffocation.

168. Q. What is the treatment of angina pectoris?

A. Venesection, blisters, anodynes. a recumbent posture, and perfect quiet of mind and body.

169. Q. How is scurvy to be treated?

A. By the use of fresh vegetable diet, the free use of lemon juice, cleanliness and free ventilation, and tonics.

170. Q. How are cutaneous diseases divided by Dr. Willan?

A. Into eight orders, viz. 1. *papulae*, (pimples;) 2. *squamae*, (scales;) 3. *exanthemata*, (rashes;) 4. *bullae*; 5. *pustulae*, (pustules;) 6. *vesiculae*, (vesicles;) 7. *tubercula*, (tubercles;) 8. *maculae*, (spots.)

171. Q. How is the first order, papulae, described?

A. Papulae or pimples originate in an inflammation of the papillae of the skin, by which they are enlarged elevated, and indurated, and made to assume more or less of a red colour. Sometimes even a slight effusion of lymph takes place, which gives a vesicular appearance to several of the papulae; but the fluid is absorbed without breaking the cuticle, and they terminate for the most part in scurf.

172. Q. How many genera are included under this order?

A. Three, viz. 1. *strophulus*, (red gum, white gum of children;) 2. *lichen*,—affects adults, and embraces *tellers*, *ringworms*, *prickly heat*, &c.; 3. *prurigo*.

173. Q. How is the second order, squamae, defined?

A. Opaque or thickened laminae of the cuticle, called scales;

commonly produced by some degree of inflammation of the true skin, over which they are formed; occasionally the cuticle alone, or with the rete mucosum, appears in a morbid state.

174. Q. What are the genera under this order?

A. 1. *Lepra*; 2. *psoriasis*; 3. *pityriasis*; 4. *ichthyosis*.

175. Q. How is the third order, the exanthemata, defined?

A. Patches of superficial redness of the skin, of various extent and intensity, occasioned by an unusual determination of blood into the cutaneous vessels, sometimes with partial extravasation. Some are contagious, others not; some are always febrile, others not manifestly attended with fever; some continue for a definite time, others are of an uncertain duration.

176. Q. What are the genera of this order?

A. 1. *Rubeola*, (measles;) 2. *scarlatina*, (scarlet fever;) 3. *urticaria*, (nettle-rash;) 4. *roseola*; 5. *purpura*; 6. *erythema*.

177. Q. How is the fourth order, bullae, described?

A. Large and often irregular vesications, which discharge a watery fluid when they break; the excoriated surface is sometimes covered with a flat yellowish or blackish scab, which remains till a new cuticle is formed underneath; sometimes it is converted into an obstinate ulcer.

178. Q. What are the genera of this order?

A. 1. *Erysipelas*; 2. *pemphigus*; 3. *pompholyx*.

179. Q. How is the fifth order, pustulae, defined?

A. Pustules, originating from an inflammation of the skin, and the consequent partial effusion of purulent matter under the cuticle, by which the latter is elevated into small circumscribed tumors; often terminating in a scabby incrustation, varying in hardness according to the various tenacity of the contained fluid; and sometimes superficial ulceration: some contagious, others not; some acute, others chronic.

180. Q. What are the genera of this order?

A. 1. *Impetigo*; 2. *porrigo*; 3. *ecthyma*; 4. *variola*, (small pox;) 5. *scabies*, (itch.)

181. Q. How is the sixth order, vesiculae, defined?

A. They are characterized by a small orbicular elevation of the cuticle, containing lymph, which is sometimes clear and colorless, but often opaque and whitish or pearl-colored. It is succeeded either by scurf, or by a laminated scab.

182. Q. What are the genera of this order?

A. 1. *varicella*, (chicken pox;) 2. *vaccinia*, (cow pox;) 3. *herpes*; 4. *rupio*; 5. *miliaria*; 6. *eczema*; 7. *aphtha*.

183. Q. How is the seventh order, tubercula, defined?

A. Tubercles, small, hard, superficial tumors, circumscribed and permanent, or suppurating partially.

184. Q. What are the genera of this order?

A. 1. *Phisma* ; 2. *verruca* ; 3. *molluscum* ; 4. *vittiligo* ; 5. *acne* ; 6. *sycosis* ; 7. *lupus* ; 8. *elephantiasis* ; 9. *frawbaesia*.

185. Q. How is the eighth order, maculae defined ?

A. They comprise those discolorations of the skin which are permanent, and most of which are the result of an alteration of the natural texture of the part. It comprehends therefore several varieties of connate and acquired disfigurements of the skin, some of which are not capable of being removed, and most of them are removable only by surgical means.

186. Q. What are the genera of this order?

A. 1. *Ephelis*, (freckles ;) 2. *naevus* and *pilus*, &c.

OBSTETRICS.

Q. WHAT are the bones of the pelvis?

A. The bones of the pelvis are five; viz. the two ossa innominata, the os sacrum, and the os coccygis.

Q. What are the general divisions of the pelvis?

A. The pelvis for convenience is divided into three parts, called—the brim, or superior strait; the cavity; and the outlet, or inferior strait.

Q. What are the diameters of the two straits?

A. In a well-formed pelvis, the diameters will be as follows: at the superior strait, the antero-posterior diameter, running from the superior part of the symphysis pubis to the projection of the sacrum, four inches; the transverse diameter, running from side to side, five inches; and the oblique diameter, running from one acetabulum to the opposite sacro-iliac junction, five inches; at the inferior strait, the antero-posterior diameter is between four and five inches; the transverse and oblique, each four inches.

Q. What is meant by a deformity of the pelvis?

A. Any material variation in the diameters from those of a well-formed pelvis, constitutes a deformity.

Q. What inconvenience may be apprehended from a pelvis of augmented capacity?

A. The uterus, in pregnancy, not ascending out of the pelvis at the usual time, produces uneasy sensations; is liable to be prolapsed, when the bladder is distended, to be retroverted; at the termination of gestation, to descend to the orifice of the vagina; and during labor, if the pains are violent, and the os tinsæ not dilated, to be forced, together with the child, out of the vagina.

Q. What are the most frequent causes of a diminution of the capacity of the pelvis?

A. The diminution of the different diameters of the pelvis is generally owing to rachitis, malacostion, exostosis, or tumors.

Q. What is the least capacity that will admit of a successful termination of labor at the full period?

A. Labor at the full time is impracticable if the antero-posterior diameter of the pelvis be less than three inches.

Q. What are the contents of the gravid uterus?

A. The gravid uterus contains the ovum, which consists of the following parts; viz. two membranes, called the chorion and amnion, closely attached to each other by cellular tissue, the inner

one containing, a quantity of fluid called the liquor amnii, in the midst of which lies the foetus.

Q. How is the foetus connected with the mother?

A. The foetus, as suspended in the middle of the membranes, is attached to the mother by means of the funis umbilicalis, commencing at its navel and terminating in the placenta, which is attached immediately to the walls of the uterus.

Q. Where does conception take place?

A. At one of the ovaria; an ovum is excited into action, passes by means of the fallopian tube to the uterus, where it is arrested and retained till the termination of gestation.

Q. What is the term of utero-gestation?

A. The process of gestation requires about forty weeks.

Q. What are the signs of pregnancy?

A. Suppression of the catamenia, nausea and vomiting, enlargement of the mammæ, the formation of an areola around the nipple, dyspeptic symptoms, and afterwards enlargement of the abdomen and motion of the child.

Q. What is intended by the term quickening, and at what period does it occur?

A. At about the end of the fourth month of pregnancy the fundus uteri ascends out of the pelvis, when, for the first time, the motion of the foetus is perceived; this is called quickening.

Q. What is labor?

A. Labor is the expulsive effort made by the uterus for the birth of the child, after it has acquired such a degree of maturity as to enable it to live independently of its uterine appendages.

Q. Into how many classes are labors divided?

A. Labors are divided into natural, difficult, preternatural and complicated.

Q. What is a natural labor?

A. Natural labor is that in which the vertex presents, the head descends readily into the pelvis, taking such a direction as brings the occiput to emerge under the arch of the pubis. The labor terminates within twenty-four hours.

Q. What are the different stages of labor?

A. Labor is divided into four stages: during the first, the head of the foetus passes through the superior strait of the pelvis, and the os uteri becomes dilated to the size of a dollar;—in the second stage the position of the head becomes changed, bringing the forehead into the hollow of the sacrum, and the occiput to emerge under the arch of the pubis;—the third stage produces the expulsion of the child through the os externum;—and the fourth stage, is accomplished by the delivery of the placenta.

Q. What are the precursory symptoms of labor?

A. Labor is usually preceded by a subsidence of the uterine

tumor, a discharge of a glairy or mucous fluid from the vagina, frequent gripings or tenesmus, and an irritability of the bladder.

Q. How many varieties of natural presentation are recognized?

A. The presentation of the vertex admits of six varieties :—the first is where the posterior fontenelle is opposite to the left acetabulum, and the anterior fontenelle opposite to the right sacro-iliac junction ; the second, where the anterior fontenelle answers to the right acetabulum, and the posterior to the left sacro-iliac junction ; the third, where the anterior fontenelle is opposite to the pubes and the posterior to the sacrum ; the fourth is the converse of the first ; the fifth, the converse of the second ; and the sixth, the converse of the third.

Q. Describe the manner of conducting a natural labor.

A. During the first and second stages, the patient may be allowed to sit or walk about, as she chooses ; an occasional examination, per vaginam, to ascertain the progress of the labor, should be made ; and all accumulations in the bladder or rectum obviated. Towards the termination of the second stage, she should be placed on the bed, lying on her left side, with her knees drawn up, her back towards and near to the side of the bed. So soon as the head of the child begins to protrude, the accoucheur, having covered his hand with a napkin, should endeavor to support, with the palm, the perineum, directing the head toward the pubis, but allowing it to advance by the effort of the mother alone. After the head is born, he should continue still to support the perineum until the delivery of the shoulders and trunk is effected. When respiration is completely established, a ligature should be applied around the funis, at about an inch from the belly, and the cord divided beyond the ligature. In the course of fifteen or twenty minutes, the pains are renewed, when the placenta becomes separated, and, together with the membranes, thrown into the vagina, from whence it is easily extracted. A bandage should now be applied to the abdomen of the patient, and she left to rest.

Q. What constitutes that variety of difficult labor, called lingering labor ?

A. Labor in which the presentation is natural ; which terminates without danger to the mother ; which is effected principally by the natural pains ; but which occupies a space of time exceeding twenty-four hours.

Q. What are the most frequent causes of lingering labor ?

A. Original or accidental weakness of the patient, rigidity of the soft parts, a slight disproportion between the capacity of the pelvis and the head of the child, extreme distention of the uterus from an excess of the liquor amnii, unusual thickness of the membrane, too early evacuation of the waters.

Q. Describe the manner of conducting a lingering labor?

A. Much must be trusted to time. Close attention must be

paid to the state of the bladder and rectum; the patient's strength should be supported; if there is restlessness, opiates may be administered; in cases of great rigidity, venesection may be necessary, together with fomentations:—care must be taken to avoid every cause of fever, or inflammation; and also to prevent the patient from exhausting herself by unavailing efforts to hasten the delivery. If the obstruction is owing to an over-distention of the uterus, or from an extreme thickness of the membranes, the remedy is to rupture the membranes—but this should not be resorted to while the head is above the brim of the pelvis; while the os uteri is undilated, or in a state of rigidity; or while the perineum is thick and firm.

Q. What course would be necessary where a labor becomes difficult from the exhaustion of the patient, the pains having become weak and inefficient.

A. In this case artificial assistance becomes necessary, as the safety of both mother and child is frequently endangered. If the soft parts are fully dilated, and the head still high up, the labor will be hastened by an exhibition of ergot; if, however, the head has descended so low, that the ear can be felt, the forceps or vectis should be applied.

Q. What are the most frequent malpositions of the head?

A. They are—first, presentation of the vertex with the forehead toward the pubis; second, presentation of the face; and third, where the position of the head is altered, by the descent of the hand or arm along with it.

Q. Describe the manner of conducting difficult labors of this class?

A. If these presentations are recognized before the rupture of the membrane, or in the early stage of the labor, the first variety may be remedied by altering the position of the head; and the third by keeping back the hand until the head has descended. If, however, the labour is far advanced, they must be left to the efforts of nature, which are generally sufficient.

Q. How would you proceed in a case of difficult labor dependent on a malformation of the pelvis?

A. If the antero-posterior diameter of the pelvis is less than three inches, the labor can only be terminated by lessening the head of the child, or by the Cæsarean operation. If evident indications of the death of the child are present, the former may be immediately resorted to.

Q. What are the symptoms indicating the death of the child?

A. They are of two classes, the first showing the child to have been dead many days or weeks: viz. severe chills, followed by a sense of coldness in the abdomen, a feeling of a dead weight or lump in the uterus, subsidence of the abdomen, want of motion in the foetus, flaccidity of the breasts, and a recession of the milk;

the second, that, though the child was alive at the commencement of the labor, it has afterwards been destroyed : viz. fetor and ill appearance of the discharges from the uterus, a want of pulsation in the umbilical cord : an adematous or emphysematous feel of the scalp, with the bones of the cranium loose and separate, and a want of motion in the child.

Q. Is a case ever rendered difficult by obstructions in the soft parts ?

A. The passage of the child may be, and is, occasionally retarded by the presence of the hymen, or an adhesion of the labia or the opposite sides of the vagina ; by a polypus or other tumor growing from the organs of generation ; by a diseased ovarium ; by a protrusion of the bladder into the vagina ; or by a hernia of a portion of intestine, &c. in the vagina.

Q. How are difficulties of this kind to be overcome ?

A. The existence of the hymen, or an adhesion of the labia, &c. is extremely rare, and would probably be overcome by the uterine action alone ; if it were not, a division may be made with the scalpel ; if the obstruction is owing to the presence of one or more tumors, and they of so large a size as to render assistance necessary, the forceps or vectis should be applied ; if they prove insufficient, either the tumor must be extirpated, or the head of the child lessened ; if the difficulty be occasioned by the pressure of an ovarian tumor, formed by an accumulation of fluid, the tumor may be punctured ; if by the pressure of the bladder, the catheter should be introduced ; if by the presence of a hernia, enemata will probably afford relief.

Q. How many species of obliquity of the uterus are recognized ?

A. There are three ; viz. where the os tinæ is inclined either to the right or left side ; when it is thrown backwards towards the projection of the os sacrum ; and when it is projected forwards over the symphysis pubis. By altering the position of the patient according to the kind of obliquity, the os tinæ may be restored to its natural situation.

Q. What is a preternatural labor ?

A. It is that in which any part of the child, except the head, presents.

Q. How should a breech presentation be managed ?

A. A case of breech presentation, though its progress through the first stage of labor is very slow, should be treated as a case of natural presentation until the nates have passed the os externum ; it should then be managed exactly like a footling case.

Q. Describe the manner of proceeding when there is a presentation of the lower extremities.

A. In order to allow full time for the perfect dilatation of the parts, and thus to remove the principal obstacle to the passage of the head, the membranes should be left entire so long as the pres-

sure of the bag of water can be of an service, and the case left wholly to nature till the nates have passed the os externum. Then, if the toes point to either sacro-iliac junction, the child is already in the right direction, and the forehead will pass into the hollow of the sacrum; if, however, they point to the symphysis pubis, the head will come in an unfavourable position. To remedy this, both thighs should be clasped; and, on the recurrence of pains, the body of the child gradually turned so as moderately to incline the face toward the mother's back. When the labor has proceeded so far that the head only remains to be born, the finger of the left hand may be introduced into the child's mouth, and the chin depressed, the left arm forming a support for its body; the fore and middle fingers of the right hand should then be passed over the nape of the neck, one finger resting on each shoulder, and on a return of the pains, by a moderate degree of extracting force, the delivery will be accomplished. The danger to the child arises from the compression of the funis; therefore so long as pulsation is to be felt, there is no propriety in hastening the delivery; but, on the other hand, if the cord is thus pressed upon, life will be in danger until respiration is established.

Q. What are the most dangerous presentations?

A. The presentation of the superior extremities are attended with the most danger, and they are at the same time the most difficult to manage; for whether it be the hand, elbow, or shoulder, it is impossible for a full grown foetus to pass without an alteration in the position.

Q. Describe the manner of proceeding in an arm presentation?

A. If it should be ascertained before the membranes are ruptured, that the arm is the presenting part, time must be allowed for the full dilatation of the os tincæ. So soon as this is accomplished, the operator must dilate the external parts till they no longer oppose any resistance to the introduction of his hand. Then slowly carrying it through the vagina, gently during the absence of pain, insinuate it into the os uteri, rupture the membranes, take hold of the feet, draw them down over the abdomen of the child, and terminate the labor as in a footling case. This is the safest and easiest case of turning, the liquor amnii being retained in the uterus by the hand of the operator.

Q. If the waters are already evacuated, and the arm and shoulder forced down into the vagina, what course must be pursued?

A. Lessen the vigor of the system by bleeding or other depleting means, or diminish the action of the uterus by an opiate; then gradually return the arm into the uterus, turn the child, and bring down the feet.

Q. How would you proceed when the funis presents?

A. If pulsation is perceptible, showing that the child is still alive, endeavor to return the prolapsed cord into the uterus; if

unsuccessful, either allow the labor to advance until the head is in the vagina, and then hasten its termination by the forceps, or turn and deliver by the feet.

Q. How would you conduct a labor of twins?

A. The delivery of the first child should be managed as a case of single birth, then wait for a recurrence of the pains for the delivery of the second. Should they not come on within a reasonable length of time, rupture the membranes, and allow the labor to terminate by the efforts of the uterus. If the presentation of the second child is unfavorable, turn and deliver by the feet.

Q. What are the symptoms of laceration of the uterus?

A. A. consciousness of something giving way internally; great languor and debility; vomiting of a brownish or coffee-colored fluid; quick, weak, and fluttering pulse; cold sweat; difficult respiration, and a cessation of labor pains.

Q. What is the method of treating a laceration of the uterus?

A. Endeavor to seize the feet and bring them down; if impracticable, and the situation of the head will allow the application of the forceps, an attempt should be made to deliver by that means:—that also proving unsuccessful, the child having escaped into the abdomen, the case must be left to the natural efforts of the constitution.

Q. What are the causes of hæmorrhage, or flooding during labor?

A. Flooding during labor may be owing to a partial separation of the placenta; to the attachment of the placenta to the cervix uteri; or to its retention after the birth of the child.

Q. How would you treat a case of labor complicated with convulsions?

A. The treatment must depend upon circumstances:—It is generally necessary to bleed freely; to administer cathartics, with enemata; to shave the head and make cold applications to it. If the labor is progressing rapidly, trust to nature; but if the pains unfrequent or inefficient, so soon as the head is within reach, deliver with the forceps. But if the danger to the mother should be increasing, and she appear to be sinking, the perforator must be resorted to.

Q. Describe the method of applying the forceps and vectis?

A. The forceps should never be applied unless the ear of the child can be felt. Then, having placed the patient on her left side, with the nates near the edge of the bed, pass the fore finger of the right hand to the child's ear, then with the left hand introduce one blade of the forceps, making the finger of the right the guide, and carry it forward over the ear; retaining the blade in this situation, in like manner introduce the other in the opposite side, bring the claws together and lock them. The extracting force should be gentle, and continued during the pains, until

the object desired be attained. The vectis is applied in the same manner as a single blade of the forceps.

Q. Describe the manner of using the perforator?

A. The os tinæ being fully dilated, the operator should place his finger over the point of the perforator, and carry it forward until it reaches the head. After he has made an incision through the scalp, he must guard the instrument, to prevent it from slipping until he has drilled through the cranium, then enlarge the opening by drawing apart the handles.

POISONS.

1. Q. WHAT is a poison?

A. A poison is any substance capable of altering or destroying some or all of the functions necessary to life.

2. Q. What are the principal mineral poisons?

A. Arsenic; antimony; copper; lead; and mercury.

3. Q. What are the symptoms of poisoning by arsenic?

A. An austere taste, constriction of the pharynx and œsophagus, hiccup, nausea, and vomiting of brown or bloody matter; great anxiety; heat and severe pain at the pit of the stomach; black and fœtid stools; small, frequent, and irregular pulse; palpitation, and difficult breathing; great thirst; burning heat; delirium, convulsions, and death.

4. Q. How is a case of poisoning by arsenic to be treated?

A. Vomiting is to be immediately excited by an emetic, of zinc, or ipecacuanha, aided by the liberal use of diluents. If vomiting is not speedily induced by these means, the stomach should be washed out by Jukes's syringe. After the stomach has been thus cleared of the poison, the next indication is to counteract the secondary symptoms. This is to be accomplished by venesection, fomentations, emollient glysters, as circumstances may require.

5. Q. Is there any known *antidote* to the poison of arsenic?

A. Sulphuret of potash, alkaline salts, charcoal, sulphur, &c., have all been recommended, but are of doubtful efficacy. Carbonate of magnesia is perhaps entitled to the most credit as an antidote.

6. Q. What are the tests of arsenic?

A. The following are the most important: viz.

1. The ammoniaco-nitrate of silver dropped into a solution of arsenic, produces a copious yellow precipitate, which in the course of a few hours turns to a dark brown.

2. The ammoniaco-sulphate of copper produces a copious green precipitate, well-known under the name of Scheele's green.

3. If a stream of sulphuretted hydrogen be passed through a solution of arsenic, it causes a yellow precipitate.

4. If arsenic be thrown upon hot coals, it burns with a garlic smell.

5. If arsenic be surrounded with a circle of charcoal, between two copper plates, and subjected to heat for a few min-

utes, on separating the plates a silver-like stain will be left upon the plates.

6. Another test is the reduction of the metal, by calcining the dried suspected matter in a glass tube, with equal parts of charcoal and potash, when, if arsenic be present, even in very minute quantity, it will be sublimed, in the form of a shining metallic coating.

7. Take a little recent wheat starch, add to it a sufficient quantity of *iodine* to give it a blue colour, mix a little of this blue matter with water so as to have a blue-colored liquid. If into this liquid a few drops of an aqueous solution of arsenious acid be put, the blue colour is immediately changed to a reddish brown, and is gradually dissipated entirely. If a few drops of sulphuric acid be now added, the blue colour is again restored.

8. Take a few drops of the solution of *chromate of potash* to the filtered solution, or to a grain of white arsenic in substance, and in half an hour a bright grass-green color will be produced.

7. Q. What are the appearances on dissection of a person who has been poisoned by arsenic !

A. The stomach is the principal seat of morbid appearances. The villous coat of that organ is most generally found in a state of high inflammation, frequently with erosions upon its surface. The villous coat may not unfrequently be separated. The intestines are also inflamed, but in a less degree. The lungs are also usually affected—they are livid, or have livid spots on their surface. The other viscera are generally in a healthy condition.

8. Q. What are the effects of tart. emetic, when taken in a large dose ?

A. Severe pain in the stomach ; excessive vomiting ; profuse liquid stools ; face pale ; great prostration of strength ; pulse small and feeble ; cramps in the extremities.

9. Q. What are the appearances on dissection ?

A. Inflammation of stomach and intestines. The lungs are also frequently inflamed.

10. Q. How is poisoning by tartar emetic to be treated ?

A. Vomiting, if not already present, to be excited by tickling the throat with the finger or a feather, and diluting with large draughts of mild fluids. The inflammatory symptoms afterwards to be subdued by the usual antiphlogistic means.

11. Q. What are the best *antidotes* to tartar emetic ?

A. Decoction of bark is the best. If this cannot be obtained, strong tea, or a decoction of nut galls, or any other astringent herb will answer.

12. Q. What are the tests of tartar emetic ?

A. 1. Sulphuretted hydrogen and the hydro-sulphurets, when

used in small quantities, throw down an orange-yellow precipitate; when used in larger quantities, a deep brown red.

2. Sulphuric acid produces a white precipitate.

3. Lime water, water of barytes, and alkalia give a thick white precipitate.

4. Infusion of galls causes a copious white precipitate, and is the most delicate test of all.

5. When heated red hot with the black flux, all the preparations of antimony are reduced to the metallic state.

13. Q. What is the preparation of copper which is most usually poisonous?

A. Verdegriis, or the sub-acetate of copper.

14. Q. What are the symptoms of poisoning by copper?

A. An acrid, styptic, coppery taste in the mouth; parched and dry tongue; a sense of strangulation in the throat, coppery eructations, constant spitting nausea, copious vomitings, or vain efforts to vomit, shooting pains in the stomach, which are often very severe; horrible gripings; frequent alvine evacuations, sometimes bloody and blackish, with tenesmus and debility; the abdomen inflated and painful; the pulse small, irregular, tight, and frequent; syncope, heat of skin, ardent thirst, difficulty of breathing, anxiety about the praecordia, cold sweats, scanty urine, violent headach, vertigo, faintness, weakness in the limbs, cramps of the legs, and convulsions.

15. Q. What are the appearances on dissection?

A. The stomach and intestinal canal are found inflamed, and sometimes gangrenous.

16. Q. How is poisoning by copper to be treated?

A. For the purpose of expelling the poison, vomiting is to be excited by copious draughts of milk and water. After this inflammatory symptoms are to be subdued by the usual means, and nervous symptoms by opium and antispasmodics.

17. Q. What is the antidote to copper?

A. Whites of eggs mixed up with water, which must be taken freely.

18. Q. What are the tests of verdegriis?

A. 1. Mix the verdegriis with charcoal, and heat it to redness in a crucible, and metallic copper will be formed.

2. Sulphuretted hydrogen precipitates a black sulphuret of copper.

3. Ammonia gives a blue precipitate, but if added in excess, the precipitate re-dissolves, and the liquor is of a beautiful blue color.

4. A clean plate of iron immersed in the solution, becomes covered in a few hours with a portion of the copper, and the blue color of the solution grows first green, and then turns to red,

19. Q. What are the symptoms of poisoning by lead?

A. When taken in large quantities, a sweetish astringent, constriction of the throat, pain in the region of the stomach, obstinate, and often bloody vomitings, hiccup, convulsions, and death.—When taken in small quantities and long continued doses, it causes *colica pictorum* and paralysis.

20. Q. What are the *antidotes* to lead?

A. Sulphate of soda and sulphate of magnesia.

21. Q. What is the treatment proper for cases of poisoning by lead?

A. A weak solution of Glauber's or Epsom salts to be drank very freely for the purpose of vomiting and purging, as well as to neutralize the poison.—Inflammatory symptoms to be afterwards subdued in the usual manner.

22. Q. What are the chemical tests of lead?

A. 1. All the preparations of lead are easily reduced to the metallic state by calcination with charcoal.

2. The *acetate of lead*, dissolved in water, is precipitated white by sulphuric acid.

3. By chromate of potash and chromic acid, it is precipitated of a canary-yellow color.

4. By sulphuretted hydrogen and the hydro-sulphurets, a black precipitate.

5. By sulphate of soda, a white precipitate.

6. Gallic acid gives a yellowish-white precipitate.

23. Q. What preparation of mercury is generally used as a poison?

A. The muriate of mercury, or corrosive sublimate.

24. Q. What are the symptoms of poisoning by corrosive sublimate?

A. An acrid, astringent, metallic taste in the mouth; stricture and burning in the throat; anxiety and rending pains in the stomach and intestines; nausea and vomiting, which is sometimes bloody; diarrhoea, sometimes dysentery; pulse small, hard, and frequent; fainting; great prostration of strength; difficulty of breathing; cold sweats; cramps in the limbs; insensibility; convulsions, and death.

25. Q. What are the appearances on dissection?

A. Inflammation of the stomach and intestines, sometimes ending in gangrene.

26. Q. What is the antidote to corrosive sublimate?

A. Albumen or the whites of eggs.—Lately wheat flour has been recommended.

27. Q. What is the treatment in cases of poisoning by corrosive sublimate?

A. The whites of eggs to be mixed with water, and one given every two or three minutes to promote vomiting as well as to de-

compose the poison. Milk, sugar and water, or water to be taken liberally at the same time. Symptoms of inflammation to be overcome by venesection, &c.

28. Q. What are the chemical tests of corrosive sublimate?

A. 1. By mixing corrosive sublimate with charcoal and water, and subjecting it to heat in a close vessel, metallic mercury is obtained.

2. By exposing it to heat without any admixture in a glass tube, it will be sublimed, and found lining the top of the tube in the form of a white shining crust.

3. By ammonia, a white precipitate is produced.

4. Carbonate of potash causes a precipitate like brick dust.

5. Caustic potash produces a yellow precipitate.

6. Lime water produces an orange-colored precipitate.

7. Nitrate of silver occasions a white curdy precipitate.

29. Q. What are the symptoms of poisoning by opium?

A. Stupor, numbness, heaviness in the head, pupil of the eye dilated, sometimes furious delirium, pain, convulsions of different parts of the body, or palsy of the limbs. The pulse is variable, but at first generally strong and full: the breathing is quick, and there is great anxiety, coma, death.

30. Q. What is the treatment in cases of poisoning by opium?

A. The stomach is first to be effectually evacuated, by emetics of tart. emetic or sulphate of zinc; large injections to clear the bowels, and assist in getting rid of the poison. When as much of the poison as possible has thus been expelled, the patient may drink, alternately, a tea-cup full of strong hot infusion of coffee and vinegar diluted with water. If the drowsiness and insensibility bordering on apoplexy be not remedied by these means, blood may be taken from the jugular vein, blisters may be applied to the neck and legs, and the attention roused by every means possible. If the heat declines, warmth and frictions must be perseveringly used. Vegetable acids are on no account to be given before the poison is expelled.

RECEIPTS.

NO. 1.—FOR FEVER AND AGUE.

Take one pound of the bark of yellow birch, half pound sweet flag, half pound of tag alder bark, two ounces thorough wort, two ounces tanzo, dry, put to these four quarts of water, and boil slow, stir and boil the liquor down one half, then let it cool and add two quarts of sweet wine and bottle for use; dose one tablespoonful every two hours till the shake comes on, then no more that day, pursue this daily and you will be satisfied of its efficacy.

NO. 2.—FOR GRAVEL.

Take horsemint, queen of the meadow, and clivers, equal parts, and boil in water down one half, and bottle for use; take one gill morning and evening, this effects a cure in about two months in the most obstinate cases.

NO. 3.—FOR INTERNAL ULCERS.

Take one pound of blue flag, one of spignut, two ounces blood root, two ounces of coltsfoot, two ounces of Solomon's seal, two ounces of burdock seed, and one handful of peach kernels, boil these in four quarts of water three hours, then strain and add one pound loaf sugar, and one pint holland gin, take one tablespoonful three times each day, before eating; this is infallible.

NO. 4.—FOR DROPSY.

Take four parts dwarf elder, three parts queen of the meadow, three parts of Jacob's ladder, three parts water or green briar, three parts of horse radish, two parts large or podded milkweed, boil them in sufficient water to cover them, then press out the liquor, and add to every quart half pint of gin, it is then fit for use; take a wine glass full every four hours through the day. And the result will astonish you.

NO. 5.—FOR CORNS.

Make a plaister of equal parts Canada balsam, and yolk of eggs, apply three times, it seldom fails curing the first application.

NO. 6.—FOR DISPEPSIA.

Take two parts man root pulverized, two parts gum myrrh, two parts anis-seed, one part saffron, one part black alder bark, two parts orange peel, one part spignut, one part gentian, one part golden seal, and one part spearmint, all pulverized, put them all in a stone jug by the fire about blood warm six days, covered with brandy, or two quarts of brandy to one pound of the compound, then strain and add one pound of loaf sugar to every two quarts of liquor; dose one tea spoonful three times each day, or sufficient to operate on the bowels once in twenty-four hours, reduce the dose as the occasion requires, this is good in all disorders of the stomach, or liver, and is my panacea. This is worth fifty dollars to any family; it has cured thousands.

NO. 7.—FOR INFLAMMATION OF THE STOMACH.

Take one part spignut, and one part bittersweet, and one part carrots boiled, apply external, then take one fourth ounce of lobe-lia, one half ounce indian turnip, one half ounce of Solomon's seal, and a handful of marsh mallows, put them in one quart of pure spirits, twenty-four hours, and take as the stomach will bear. This is an excellent prescription and seldom fails.

NO. 8.—FOR DIARRHOEA OR FLUX.

First, take cordial, two scruples rhubarb, two of cinnamon, one of saleratus, one gill of boiling water, sweetened with loaf sugar, and one table spoonful of best brandy. Second, syrup one part bayberry bark, one part cherry tree bark, one part white poplar bark, half part pond lilly, half part blackberry root, boil them and sweeten with loaf sugar, and a very little brandy. Third, injections, one pint mucilage of elm, one pint mucilage marsh mallows, one gill molasses, one pint sweet milk, half tea spoonful saleratus, and one fourth ounce of lady slipper. Fourth, wash the whole surface with saleratus and water, night and morning. Fifth, rubefacient to the bowels, one table spoonful of spirits turpentine, and four of water, and four of brandy applied warm once in four hours, and a warm flannel bandage applied round the body. Directions, give

one table spoonful of the syrup every hour, and a tea spoonful of the cordial at the same time, until the evacuations are healthy, then continue the syrup alone, give an injection once in four hours, after applying the rubefacient to the bowels; for drink use mucilage of elm, or marsh mallows, and virginia snake root, or ginger. This is infallible.

NO. 9.—FOR PILES.

If the piles are outward, make an ointment of fireweed, sage, parsley, mayweed, burdock, narrow dock, sweet elder and butter. simmered together, anoint the parts with this two or three times each day, and drink constantly a tea made by steeping the roots of burdock and narrow dock, as much as is convenient, but if they are inward or blind piles, apply the balsam of tameraok on cotton to the parts, and drink essence of fur every night. Infallible.

NO. 10.—FOR OBSTRUCTED MENSTRUATION.

Take three parts of female flowers, commonly found by the side of ponds, leaf deep green, shapen like the cowslip, flowers of a bright yellow, this certainly is one of the first herbs in the world for females; two parts of unkum, found in swamps, known by the name of blood gut, and one part of Indian pink, boil them in fair water till the strength is all out, then strain and add to this as much port wine, or good madeira, as will keep it from souring, and take a wine glass full three times each day, if the bowels are costive, use a little syrup of elecampane, and I warrant you a speedy cure.

NO. 11.—FOR ASTHMA.

Take one ounce of lobelia seed, one ounce skunk cabbage root, one ounce of garlic, half a pound of seneca snake root, half a pound of spignut, half a pound of parsleyroot, one pound of liquorice root, and the liver of a sheep or calf, or wolf, boil them all in one gallon of sweet wine, and three gallons of rain water, till you reduce it one half, then bottle for use; dose half a table spoonful, three times each day one hour before eating. This has cured hundreds.

NO. 12.—FOR PLEURISY.

Take one fourth of an ounce of lady slipper, one fourth of an ounce of red pepper, one fourth of an ounce of coriander seed, one

and one fourth ounces of ginger, pulverize them all together; dose one tea spoonful every fifteen minutes till the pain subsides, this will generally be in one hour, take pleurisy root pulverised fine and steeped strong any quantity and take as the stomach will bear, till a sweat is brought on all over the body, then wear a flannel band around the abdomen a few days, and the cure is complete without weakening and debilitating the system by bleeding. This is infallible.

NO. 13.—FOR MEASLES, CANKER RASH OR CHICKEN POX.

Take equal parts of queen of the meadow, white snake root, coltsfoot snake root, marigold and saffron, steep them together and drink plentifully through the progress of the disease; a vomit of equal parts of thoroughwort and lobelia, is necessary once in about three days, keep the body from exposures of cold or wet, and let the food be light and easy of digestion.

NO. 14.—FOR THE SMALL POX.

Take half a pound of saffron, half a pound of spignut root, one pound sassaparilla, one fourth of a pound of the seeds of young cedar, or one ounce of the oil of cedar, one fourth pound of sage and make into one mass, then steep strong as much as you think you can consume in one day in decoction, it is best made every day fresh as liquor of any kind is injurious and it will not keep longer in warm weather without spirits. This may be taken in any quantity and at any stage of the disease, and has never been known to fail when the patient is kept clean and warm. If the patient should by accident or imprudence take cold it is necessary to ake 10 or 15 large onions, roast them, press the juice and let the patient drink the whole at once and apply the pressed pomice to the feet and he will soon be in a profuse sweat. This is infallible.

NO. 15.—FOR COSTIVENESS.

Take equal parts of balmony, elecampane, spignut, gentian, ginseng, indian turnip, and tomatoes, boil them all in a quantity of fair water, boil it down to the consistency of new milk, then add one fourth quantity of good wine, and bottle for use; dose table-spoonful three times each day before eating. This is one of the best preparations in this Materia Medica.

NO. 16.—FOR CHOLERA MORBUS.

Take equal parts of indian turnip, cayenne pepper, prickley ash berries, half part of spearmint, half part of horsemint, half part of bayberry bark, half part of sage, boil it in four quarts of water down one half, let it be well sweetened with loaf sugar, and a little brandy; dose half tea spoonful every half hour, till relief is obtained. The patient also ought to have an injection of slippery elm, with one fourth teacupful of the above in it. When this is strictly attended to, it never fails to relieve.

NO. 17.—FOR CONSUMPTION.

This disease is one of the worst of diseases that attend the human frame, and is the most obstinate to subdue, and for this reason there are many old women and quacks prescribing specifics for it, but when tested prove inefficient for the malady, the patient generally sinks under the most skillfull treatment when deeply seated. I believe the only remedy is death, but as we are all anxious to try every means when death stares us in the face, I give you the following for trial, it has cured many diseases of the breast and lungs, but I believe it never cured the consumption when seated. Take first one part elecampane, one part spignut, one part sage, one part hoarhound, one part yellow parilla, one part golden seal, one part Solomon's seal, half part of gum myrrh, half part gum guaiacum, half part tamerack gum, all boiled in rain water, then put one gill of wine to every pint, bottle up, and take one wine glass full three times each day, also take one quart of St. Croix rum, and one pint honey, allum the size of an egg, boil and skim as long as there is any froth, then bottle for use; dose one table spoonful three times each day, with the above syrup.

NO. 18.—FOR INFLUENZA.

Take one ounce of cinnamon, half ounce of cloves, half ounce of hemlock bark, half ounce of gum arabic, mix all together in one quart of boiling water, take half teacup full, three or four times an hour, till you are in a profuse sweat, then take less as the occasion requires. Make a mucilage of elm, or blue flag, and drink plentifully, also sweat the throat with sage and hops, bath the feet in saleratus, and vinegar, and keep warm. This is a good receipt and seldom fails.

NO. 19.—FOR COUGHS..

Take one ounce of meadow cabbage, one ounce of lobelia, half ounce of indian turnip, one fourth ounce of blood root, handful of hoarhound, one fourth ounce of elecampane, and the weight of the whole of purified honey, pulverize the ingredients and mix them up, and let the patient take what the stomach will bear, till well.

NO. 20.—FOR PALSY.

First let the patient thoroughly cleanse the blood with burdock root, then take one ounce of umbil, called lady slipper, half pound of angle worms, half pint of spirits turpentine, fourth of a pound of lobelia seed, one ounce oil origanum, one ounce oil of spruce, one ounce oil of cinnamon, four green frogs alive, put these all in a stone vessel, under a heap of rotten manure, well stopped up for ten days, then take it out and strain it, and rub the afflicted parts with it, and wrap the parts in flannel as warm as can be borne, let the patient drink plenty of sage, pennyroyal, or horsemint tea, for a constant drink, and I warrant them a speedy cure.

NO. 21.—FOR GOUT.

Take the buds of the balm of Gilead, and put them in alcohol, and apply to the affected parts, (inwardly,) take queen of the meadow roots one ounce, hemp one ounce, of spignut one ounce, steep them, and mix with one bottle of sarsaparilla syrup, take sufficient to keep the bowels laxative. This is certain.

NO. 22.—FOR RHEUMATISM..

Take one ounce of cayenne pepper, four ounces of ginger, two ounces of cinnamon, two ounces of cloves, one ounce of gum guaiacum, one ounce of gum myrrh, one gallon fourth proof spirits, let them stand by the fire ten days before bottling, then place them in corked vessels and take one wine glass full three times each day, before eating. Rubefacient for the surface, boil one pound of red pepper, in one gallon of vinegar and wash every night just going to bed, also wear flannel next the skin continually.

NO. 23.—FOR QUINSEY.

First take a flannel cloth and wet it in strong boiling vinegar and apply it around the neck, repeat this as often as it gets dry,

then take one pint of brewers yeast and let the patient take one table spoonful every few minutes and gargle the mouth with the same, and swallow some ; do this till the whole is gone and with it your quinsy will be gone.

NO. 24.—FOR WHOOPING COUGH.

Take equal parts of elecampane, skunks cabbage, hoarhound, and spignut, and boil till you extract the strength, then strain and boil down again to the consistence of tar, then add twice its weight of pure honey, and put it in a warm oven till well baked, let the patient take half tea spoonful often through the day. This is sure.

NO. 25.—FOR CROUP.

This is very fatal among children. The best remedy for it is, equal parts blood root, lobelia, garlic, skunks cabbage, elecampane, sage, and thorough wort, or seneca snake root, or if the whole cannot be had, lobelia tincture, will do alone, or lobelia, and mul-len 'roots, in decoction, give as much as possible, as the stomach will immediately eject any of these articles in this disease.

NO. 26.—FOR RICKETS.

Drink a strong tea of sage, and sweet fern, and sleep on a bed made of the same until well, wash often in saleratus and strong cider or vinegar.

NO. 27.—FOR LIVER COMPLAINT.

Take equal parts of tomatoes, balmony, yellow poplar, spignut, saffron, cinnamon, nutmegs and queen of the meadow make an extract of these and then pill with unicorn, take from three to five daily. Infalible.

NO. 28.—FOR JAUNDICE.

Take equal parts of white snake root, burdock, narrow dock, dandelion and cowslip blows, steep them together and drink as much as you can till well. This is a sure cure.

NO. 29.—FOR DIFFICULTY OF URINE.

Take clivers, queen of the meadow, gravel wort, water brier, and brook lime, steep them in boiling water, let them steep till all the strength is out, then let it cool and drink this for a constant drink. This will be certain it never fails.

NO. 30.—FOR GLEET.

Take bloodroot, cocash, water brier, unkum, burdock, raspberry leaves, and white snake root, steep strong, and drink what the stomach will bear, for a wash take lobelia seed, gum myrrh, gum guaiacum, and oil of cedar, put them in alcohol and use two or three times each day. Infallible.

NO. 31.—FOR VENEREAL,

Take burdock, narrow dock, yarrow, knott grass, clivers, bloodroot, equal-parts, half part of water brier, half part Jacob's ladder, half part wormwood, half part lobelia herb, boil all in rain water, so as to make one gallon about the consistency of new milk, then add as much sugar as will preserve it, and drink daily what the stomach will bear. If there is costiveness, take frequent doses of lime water, make a wash with the tincture of lobelia, and spirits of turpentine, use it often, take a new cloth every time, and never put the cloth in the wash, but pour the liquid on the cloth, and then after using throw it away, change the linen often, and this is a sure cure in the worst of cases.

NO. 32.—FOR WHITES.

Make a syrup of unkum, bloodgut, knott grass, yarrow, house plantain, raspberry leaves, and rue, boil the whole in fair water, sufficient to extract the strength, then strain and add to each quart one pound loaf sugar, one pound pure honey, one pint port wine, and take two table spoonsfull three times each day before eating, steam the parts with a flannel soaked in liquor in which hazel leaves have been boiled, (that is water, understand,) apply this three or four times if the occasion requires.

NO. 33.—FOR NERVOUS AFFECTIONS.

Take one ounce lobelia seed, one ounce cayenne, one ounce Solomon's seal, one ounce of blue violet roots, one ounce of spig-

nut, two ounces of yellow poplar, handful beech drops, the same quantity of Indian pipe or fit root, put the whole in four quarts of pure Holland gin, by the fire, lightly corked seven days, then strain and add four pounds of molasses, or brown sugar, and pour two quarts of rain water, bottle for use. This is infallible.

NO. 34.—FOR ULCERS ANY WHERE ON THE BODY.

Wash the complaining parts with lobelia tincture every day, and make an ointment of green frogs, shrub, maple, spignut root, gumfrey, white elder bark, and blue flag root, two ounces of each, to four green frogs, first steep the roots, barks and herbs in two pounds of hogs lard, then strain after boiling, and apply this daily to the ulcer; and the effect will astonish you.

NO. 35.—FOR SORES.

Take male hogs lard one pound, spignut half pound, fourth of a pound of Solomon's seal, the extract of dandelion one ounce, the seed of lobelia one ounce, one ounce of spirits turpentine, four ounces rosin, two ounces beeswax; and make it into a salve, and apply till well.

NO. 36.—FOR SCROFULA.

Cleanse the blood with burdock, and black alder bark, and tag alder bark, and sassafras bark and wash the surface with tincture of tony weed, and brewer's yeast, dry the parts well after using. This is simple and sovereign.

NO. 37.—FOR CLEANSING THE BLOOD.

Take burdock roots brush them clean, and slice them up, and put them in cold water, and drink for common, or take yellow dock, and boil it in water, and drink half pint each day, or take a decoction of sassafras for a common drink, or black alder bark, or tag alder bark, or cucumber bark, or yellow poplar bark, in decoction, these are all very good, and are best when used alternately.

NO. 38.—FOR PAIN IN THE SIDE.

Make a plaister of the balsam of Canada, or tamerack, and

wear on the side, and drink a tea made of bittersweet and célandine. Infallible.

NO. 39.—FOR PROLAPSUS UTERI.

First let the patient be placed as near as possible in an horizontal position, and remain as much as is convenient in that position for eight or ten days, during which time there must be steeped in water, witch hazel leaves, and slippery elm, and flannel cloths wet with this liquor, applied to the parts as often as they cool, they must be as warm as can be borne, the patient must take as much beth root, pulverized, as will fill a teaspoon, three times each day in half teacups full of the same liquor. also a free drink of either, or all of the articles under the head of the receipt for cleansing the blood, the patient's food must be light soups, or mucilages, till the cure is effected, drastic purges must be avoided always.

NO. 40.—FOR THE ITCH.

Take one pound of burdock root green, one pound of, yellow-dock root, and tops green, boil them in two quarts of water one hour, then strain, and add fourth of a pound of hogslard, two ounces of sulphur, four ounces of spirits of turpentine, then boil again to the consistency of tar, wash all over first, then rub it in well by the fire just before going to bed, repeat this three times, and then change your clothes and keep clean. This never fails.

NO. 41.—ST. ANTHONY'S FIRE.

Take equal parts of tory weed, lobelia herb, witch-hazel, knott grass, and tag alder bark, green or dry, boil them strong, and wash the complaining parts, and let the patient drink at intervals a little syrup of sarsaparilla. This is an immediate cure.

NO. 42.—FOR FEVER.

First take an emetic of lobelia, accompanied with stimulants so as to cause free perspiration, then relieve the bowels with some mild physic, bitterroot is as good as any, this is the small milk-weed, take one table spoonful of the powdered root in a little water, and repeat as often as necessary till the evacuations are healthy. If the fever is not entirely broke, you must repeat the above, then

make some bitters with yellow poplar, balmony, and black cherry bark, in wine, or gin; this is the best way to cure fevers, as it neither needs the lancet, nor calomel; and is perfectly safe.

NO. 43.—FOR WHEEZING OR SHORTNESS OF BREATH.

Take one ounce of skunk cabbage root dry, one ounce of mul-len root dry, and half pound of liquorice root, put them all in two quarts of Malaga wine or sweet wine, and exercise moderately.

NO. 44.—FOR WIND IN THE STOMACH.

Take equal parts of unicorn root, Indian turnip and prickley ash berries, and pulverize them and take one tea spoonful in a little liquor, and it is a very sure cure, or take one ounce of each of the above and put in one quart of gin and take as occasion requires.

NO. 45.—FOR LOSS OF APPETITE.

Make a syrup with equal parts, white and black cohosh, half part golden seal, half a part of bitter root, half a part of columbia root, and put sufficient liquor in it to preserve it. This restores the appetite in debilitated cases.

NO. 46.—FOR PAIN OR CHOLIC IN THE BOWELS.

Take cayenne pepper, cloves, unicorn. dogwood bark, and prickly ash berries, equal parts or a half part of the cayenne and put them all in spirits sufficient to cover them, they will be fit to use the second day after making, or boil the bottle that has them in with the liquor one hour, and they may be used; take one table spoonful at a dose in a little water, repeat as often as necessary. This is also good for the pleurisy, there is no danger if you use a dose every ten minutes, if the pain is not reduced follow up till it is, then take physic.

NO. 47.—FOR BLEEDING AT THE LUNGS.

Make a syrup with one ounce of red beth root, half an ounce of bayberry root in some water, in which witch hazel leaves have been boiled in, one pint, then add half a pint of good wine and

sugar, or honey, and take one table spoonful every ten minutes till it abates or ceases, then take half a pint of yeast and boil it with the same quantity of balsam of tamarack and take one table-spoon night and morning for ten days, sure cure.

NO. 48.—FOR CANKER IN THE MOUTH.

Take golden seal, gold thread, elecompane roots, equal parts, then pulverize them and take one ounce of the mixture, and put to it one ounce of alum pulverized and the whites of four eggs, then put them into a mortar and mix them well, and take a little in the mouth and keep moving it round till it is all decomposed, then wash the mouth and repeat once an hour; it is also necessary to take an emetic to cleanse the stomach.

NO. 49.—FOR WORMS.

Take one ounce of wormwood, one ounce of elecompane, half an ounce of lobelia, one ounce of tamarack, balsam, and one ounce of sage, put the whole in one pint of spirits of turpentine and half a pound of honey; these articles must stand in blood warm heat, for one or two days, then pressed out and they are fit for use; one tea spoonful every hour for four hours for a child of five years old, is a proper dose in sweet milk, and varied according to the age: it is best to give this in the morning and then directly after give a dose of Castor Oil and the worms must be carried away if there is any.

NO. 50.—FOR POLYPUS IN THE NOSE.

Wash the external parts with the tincture of lobelia daily, and make a snuff with equal parts blood root, ginger, lobelia seed, and cloves, and this will kill the polypus, then pull it out, and syringe the parts with the tincture of lobelia, or mullen, until well.

NO. 51.—FOR SHRUNK SINEWS OR STIFF JOINTS.

First put in a copper vessel, one layer of hogslard, and then one layer of wormwood, then again a layer of hogslard, then a layer of tanzey, then again the lard, then a layer of green melolet, then

again the lard, then a layer of Bittersweet bark, then again the lard; then cover the whole tight with a lid, or plate, let them simmer four hours, then strain, and apply first the dregs in two separate parts to the joints affected, and the one above till it becomes cold, then throw it away, and add to your ointment four green frogs, and half pint spirits turpentine, and again boil four hours and strain, then bind on the frogs as before directed, by this time your ointment will be sufficiently cool to use, the ointment must be applied to the affected joint, and the one above, for a month or more if necessary. This will perform a cure in almost any case, keep the bowels open during the treatment with laxitives.

NO. 52.—FOR BLEEDING AT THE NOSE.

Take birthroot, and cranesbill, pulverized, and snuff this up the nostrils, and I warrant you a speedy cure. They must be gathered and dried, then pulverized and mixed, and kept constantly on hand where there are persons afflicted with this simple disease, which sometimes proves fatal.

NO. 53.—FOR KINGS EVIL.

This disease may be cured with the plant by the same name, it grows in moist shady land, under almost all kinds of timber through the United States, it is something like plantain, but the leaves are smaller, spotted green and white, it is a beautiful plant, when it goes to seed there is one stalk which comes up in the middle of the plant, about nine inches high, it carries the seed in a small round bud at the top take the whole of it, root, leaves, and top, and pound it soft, apply to the tumor the poultice, when it is broke apply the salve made from the same with balsam of fir, and male-hogs lard, wash the parts in a strong decoction of the same daily, and drink of the tea night and morning. And this will never fail.

NO. 54.—FOR SPITTING BLOOD.

Make a decoction of cranesbill, birthroot, and gill-go-by-the-ground, equal parts, steep them strong, and drink as often as three or four times each day, this is cooling, abstersive, and vulnerary, and is the best compound for this complaint in the world.

NO. 55.—FOR HYSTERICS.

Take a quantity of mountain tea, white root, and unkum root, equal parts, pound them, and make them into pills with Canada balsam, and yellow poplar, take two or three of these pills when the disorder is coming on; it seldom fails to arrest it in its progress,

NO. 56.—FOR CANKER RASH.

Pulverize white birthroot, and give the patient small doses, four or five times each day, for the fever give sage, or pennyroyal tea, with some laxitive medicine. This is an excellent remedy.

NO. 57.—TO STOP A FEVER SORE FROM COMING TO A HEAD, AND CARRY IT AWAY.

Sweat it with flannel cloths, dipt in hot brine, the cloths must be changed as often as they get cold for three hours, and then washed in alcohol, and bound in flannel, repeat this five or six times, and then take shrub-maple, and drink some of the decoction, and wash with the same, burdock roots shaken in cold water, are very good to purify the blood, and assist in curing this disease.

NO. 58.—TO CURE A WEN.

Take one pound of lead, and boil it in one quart of water, then take the whites of eggs, and mix with it, and make into ointment, bind this on the wen with a cotton cloth; This will certainly cure the wen.

NO. 59.—FOR LOCK JAW.

When a person is taken with the lock jaw, give from half a tea spoonful of the pulverized bud of lobelia, with the same quantity of Indian turnip, in a little warm water, repeat this every fifteen minutes, place the feet in a tub of warm water, and wash the head with the stimulating linament, then after the operation of the lobelia, place them in a warm bed, and place a hot stone to

the feet wrapped in wet flannel, and the same to his side. This never fails, repeat if necessary.

NO. 60.—TO STOP VOMITING.

Give the patient as much poland starch, as he can conveniently take, or take a handful of grass, pound it fine, and put water to it, and let it be pressed; and give the patient as much as a gill once in half an hour, repeat till you have accomplished your object. The first is the best remedy in the world.

NO. 61.—A SURE REMEDY FOR WOMENS SORE NIPPLES.

When the infant stops sucking, apply a plaister of Canada balsam, or balm of tamerack; this cures in less than a week, or apply the tincture of lobelia, as a wash to the breast, or wild cabbage leaves, over the fire, and put half a dozen on the breast at a time, steep it three or four times.

NO. 62.—FOR CONVULSION FITS.

Take any quantity of Indian pipe, steep and drink as much as the stomach will bear three or four times a day, then make a syrup of the same, and sweeten with sugar, and take a wine glass full every morning. This is an Indian remedy, and well approved by all who have seen it used.

NO. 63.—FOR STOPPAGE OF WATER.

Take a quantity of water brier, Jacob's ladder, queen of the meadow, parsley, and horse radish; put them in old cider, and drink a glass three or four times a day.

NO. 64.—FOR APOPLEXY.

The tincture of nicotianne drawn with rectified French brandy, may be given to the patient, which instantly causes a great quantity of mucus to come out of the head, and afford a considerable relief, particularly if the remedy is repeated two or three times.

One can also give the extract of balm mint, from one scruple to one drachm; or the water of the same plant, from two to six ounces.

Likewise real queen Hungary water, from one to two drachms; or spirits of wine, from one to three drachms, do not less relieve the patient.

NO. 65.—BALSAM TO CURE SORES.

Take some flowers and leaves of hypericum or St. John wort, of valerian, of sage, and of the two sorts of aristolochy round and long, about the same quantity of each; add to it a sufficient quantity of oil of turpentine or oil of roses, and boil the whole on a slow fire during one hour, afterwards, strain and press your balsam, and put it into a glass or earthen vessel and use the same when required.

NO. 66.—BALSAM TO EASE PAINS.

You must take nettles and plantain leaves, and of the large daisy, of each three handfuls, with ten pounds of oil of acorn, and two quarts of the best white wine; put the whole together into a glass vessel, after having well pounded the herbs in a mortar, and having covered the vessel, put it to infuse on some hot ashes during twenty-four hours, and then cook it on a slow fire, until the wine is almost consumed; then strain and press well your balsam, and keep it as above to make use of in liniment for all kinds of pains.

NO. 67.—BALSAM FOR ALL KINDS OF PAINS.

Take laurel leaves, wormwood sprouts, marigold flowers and leaves, of each two handfuls, cut them all very fine, sprouts of fine sage and of rosemary flowers and leaves, of each three handfuls, and eight handfuls of juniper berries; put the whole in glazed earthen pot, and after having poured over it a quantity of sweet oil so as to cover the whole about an inch, cause it to infuse amongst some very hot horse dung, during several days, then you will cook it over a very slow fire, and after it is done, you must add to it a small quantity of new yellow bees wax, a small glass of brandy, and one dozen of cloves; stir well the whole, and let it take a little boiling over the fire, and then strain it through a strong linen, pressing the ground well, and keep it for use in an earthen pot.

NO. 68.—A CATAPLASM TO RESOLVE ALL SORES AND TUMORS.

Take one handful of grape vine branch ashes, which you will put to infuse into a pint of good white wine over hot ashes during fifteen or sixteen hours. In this colature, dilute a small handful of rye meal with the bran in, to make with it a kind of mush. Spread this cataplasm on a red cabbage leaf past over the fire, of the like size of the afflicted part, and apply over it a warm cloth in several folds.

NO. 69.—FOR SWELLINGS AND INFLAMMATIONS.

Take one pint of good wine, some crumbs of white bread, or such as you can get, and a spoonful of oil of sage; make with the whole a mush, which you will apply hot two or three times a day. When it is to apply to a sore breast, the oil of roses is not necessary.

NO. 70.—TO CAUSE SORE BREASTS TO OPEN.

Take two handfuls of sorrel, put it into an earthen pot, with a piece of fresh butter of the size of an egg, one or two spoonfuls of verjuice. Boil the whole together, until it is done, take it from the fire, and put into it some leaven of the size of two walnuts, when it is no more than luke warm, take a little of it, and apply on the sick part, after having previously greased it with oil of roses, and change it three times a day. You must never break the sore when it is on the breast, but let it break itself.

NO. 71.—TO APPEASE PAINS.

Take some soot, white of eggs, and a little oil of roses, beat the whole together, and make of it a cataplasm. Or else,

Take some good bran, flax-seed, beer, oil of camomile and melilot, with which you will make your cataplasm.

NO. 72.—FOR ALL KINDS OF SWELLINGS.

Take half a pound of the meal of Windsor beans, two handfuls of well pounded wheat bran, two handfuls of ox dung, worm wood

leaves, camomile flowers and melilot, one handful and a half, oil of roses, and of aniseed of each two ounces, clear lye of ashes as much as will be necessary; the whole well pounded and put to boil altogether, and stir it until it thickens, you will then spread it on tow, and apply it warm to the afflicted part, and change it twice a day, until a cure takes place.

NO. 73.—FOR PAINS AND SWELLINGS.

Take some Provinse roses, port wine, wheat bran and oil of roses, and make of it a cataplasm, and apply it as warm as you can bear it on the sick part.

NO. 74.—FOR COMPLAINTS ABOUT THE EARS.

This complaint is a swelling that comes under the ears and that goes down to the neck; here are the remedies to cure it. Take a lily oignons and cut it, then cook it with half a glass of oil of violet, and the same quantity of wine, until the wine is consumed; afterwards throw into it half a handful of marsh mallows cut fine, the yellow of an egg and some rye flour, until the whole be capable of forming a cataplasm, to be applied warm on the disease; it must be changed three times, then the patient must be bled. Lilly oil with some black sheep's wool, is also proper for it. It is also necessary to purge the patient with glisters.

NO. 75.—FOR SORE BREASTS.

Take one spoonful and a half of rye flour, which you will dilute with a gill of white wine, let it boil three or four bubblings, then take it off the fire, and put into it a large handful of ashes of the branches of grape vine, a little tallow, and a little of turpentine of Venice. Boil it again three or four bubblings, and stir it constantly until it be of a consistency to make cataplasms. This causes the sore to open, without being obliged to make use of the lancet. Hereafter, and in the article of plaster, will be found other remedies, to ripen and resolve a posthumed breast, and for other complaints of the same.

NO. 76.—FOR CANCERS.

Take a large red onion, roast it well, take pocoon root finely powdered, mix this powder of the root with the onion, which must be well beaten, in the proportion of a tea spoonful to one onion: make of this a plaster just large enough to cover the sore. If really a cancer, this will produce great pain, yet the patient must not be alarmed, but repeat this every twelve hours, until the body of the cancer assumes a deep purple or black colour. Two plasters will generally effect this. The next preparation is this:

Take young poke root roasted, one handful, add one spoonful Jamestown seed powdered, about the same quantity of boars tusk root; (this root ought to be kept soaked in water;) beat these well together, then moisten this compound with the water from which the root is taken, and apply it night and morning. This is for the purpose of drawing out the cancer. Care must be taken not to force it out only as the plaster itself effects it, as such an operation would tend to break the small roots before they are entirely killed. If they are not entirely destroyed it may be known in eight or ten days as inflammation will take place; in such a case, the first preparation may again be used, and continue to be used once in ten days, until all the roots are destroyed, then the plaster will heal the sore.

Any careful person may perform the cure of cancers by a strict attention to the above directions.

NO. 77.—ANOTHER FOR CANCERS.

Another evidence of the efficacious quality of pipsissiway in curing cancers. James Lewis, of this country, has called upon me, and wishes me to make known, that he was cured of a very large and painful cancer, by the use of pipsissiway tea, a strong decoction of the same which he applied to the sore, in the space of three weeks time; the cancer was on his cheek, the scar of which is still visible, and shows it to have increased to an alarming degree. He likewise affirms that it will cure other eruptions.

NO. 78.—FOR WINDY CHOLIC.

Take acorn oil, from two drachms to one ounce, or else the acorn itself grated with its shell, likewise from one to four scruples, which will wonderfully relieve the patient from pains, by dissipating all winds that caused them. It is to be taken in a glass of

white wine. Some nutmegs grated in broth, affords a great relief, or oil of aniseed from one to six drops.

NO. 79.—FOR BILIOUS AND WINDY CHOLIC.

Take twelve or fifteen leeks, cut them into bits, put them in a kettle and cook them in a quart of vinegar, during three or four hours; when they are done, take them up with a skimmer, and apply them with your hand, on the skin where the pain lies, and towards the heart; dip afterwards, a napkin, which you will fold in four double, in the vinegar that has remained in the kettle, and put it over the said leeks; bind the whole with another dry napkin, and you will keep yourself laying on your back during two hours; after which you will take a glyster with honey.

NO. 80.—FOR NEPHRITIC CHOLIC, PHLEGMS, SAND, STONE IN THE REINS, OR IN THE BLADDER, OR OTHER COMPLAINTS.

Take nephatic wood the weight of two ounces, which is sold by druggists, cut it in the finest and thinnest manner possible, and put it in a small glass bottle, pour over it some of the best brandy made of wine, until it covers the said nephritic wood, three good fingers breadth: leave it in infusion during three or four days, until the brandy has entirely drawn the virtue of said wood; and whenever any person is attacked with the accidents common to that disease, as extraordinary swellings of the belly with pains, pains about the reins and ureters, or inclination to vomiting, take finger's breadth in a glass of that infusion, which will much relieve; but if the complaint be too tenacious apply over the region of the ureteres some small bags filled with pellitory boiled in white wine; nevertheless, without the help of these said small bags, the virtue of this infusion will manifest itself, by the ejection that will take place with the urine, that will be thick and of a greyish cast, and sometimes mixed with sand, gravel or stone that caused the pain. This remedy may be repeated more than once in order to obtain more relief.

NO. 81.—FOR CHOLERA-MORBUS.

Every year being extremely fatal to children, as such numbers of them have been swept away by the flux and cholera, or vomiting and purging; the following remedy for the cure of these diseases will be acceptable. Take oil of peneroyal, two drops to

a table spoonful of molasses, after being well stirred up, let one tea spoonful be administered every hour until it has the desired effect, which from experience, I can assure safely the public, will be found in every case of the above disorder to be a speedy and certain cure. For a grown person the dose may be doubled and given in the same manner.

NO. 82.—ANOTHER.

Toast or brown in a vessel, as you would coffee, four table spoonfuls of oat meal, pour on it a pint of boiling water, add a little sugar to make it agreeable.

If the child is not too young, let it drink of it, grounds and all stirred up together. It is believed that this toasted oat meal tea is scarcely ever ejected from the stomach, on which it lies light, and to which it proves exceedingly grateful. For the information of the poorer class of citizens it is requisite to mention that oat meal can be procured at any of the druggists' shops.

NO. 83.—FOR CRACKED HANDS.

In the first place wash your hands in warm water, then rub on common soap thoroughly, and scour your hands about two minutes with house ashes; then wash them again in warm water. This repeated a few times will effect a cure and keep the hands soft and pliable.

NO. 84.—FOR DIARRHOEA AND COMPLAINT OF THE BOWELS.

In case of a bilious diarrhœa, one may make use with a happy success during a few days in the mornings, of a dose prepared with two ounces of the oil of sweet almonds, one ounce of lemon juice, and four ounces of plantain water.

Distilled water of acorn, impregnated with its fixed salt, and often given to the patient at the weight of two ounces, with one ounce of red poppy syrup; stop in a short time, not only the lax, but also (in women) the whites and excessive menstruous flux. One may also make use of the greatest part of the remedies proper to the following sickness.

NO. 85.—FOR THE DYSENTERY.

Take of walnut oil extracted without fire, two ounces, the same quantity of rose water, beat them well together, and give to

the patient in the morning fasting, two hours afterwards, he must take a bowl full of boiled milk, with salt or sugar, and he will receive a quick relief from it.

NO. 86.—FOR DROPSY.

Take about two large teacups full of Bohea tea, infuse it in a quart of water, and during the day, the decoction is to be drank, and the leaves eaten.

NO. 87.—ANOTHER FOR THE SAME.

Take a gallon of fresh strong beer about milk warm, and mix a handful of horse-radish bruised, a handful of fennel roots bruised, a handful of parsley roots, and tops, a handful of burdock roots, a handful of the bark of the roots of elder, a handful of spice wood, a handful of water cresses, a handful of sarsaparilla, all to be bruised and put into the beer, with a sufficient quantity of yeast to work it. Let it stand for twenty-four hours, then strain it, and it will be fit for use.

NO. 88.—ANOTHER FOR THE SAME.

Take two large handfuls of fern, scrape it a little to take off the dirt, and put it to boil in a large pitcher full of water during two hours. It is used at meals like other water. You must make use of the fern that has but one branch, because the sort that has many branches is not proper.

NO. 89.—FOR THE SAME.

Almost all persons afflicted with the dropsy, are cured by taking through their mouth or in glyster, every third day, a decoction of worm-wood, and polypody.

NO. 90.—PTISAN OR TEA, FOR THE DROPSY.

Take some root of large nettles, that are yellow, with some marrow of elder, one handful of dandelion leaves, and dog's grass root, boil the whole in three quarts of water, until reduced to two quarts, and let the patient drink one glass of it every morning fast-

ing. At his meals, some may be mixed with wine, and must drink of it, as often as he is thirsty.

NO. 91.—FOR THE SAME.

Take one large handful of parsley, wild succory roots, and fennel roots, and one handful of sage. You must pick out the strings or cords that are in the roots, and boil the whole in eight quarts of spring water in a new glazed pot, and let it consume to one half, then strain it through a linen cloth, and put up this water into phials well stopped. The patient must take, fasting, one glass of it, into which glass you must have put two fingers breadth of good white wine, that it be neither sweet nor tart, and the patient must not eat for three hours after; the same dose must be repeated three hours after dinner, and the same regimen observed and continued until a cure takes place.

NO. 92.—FOR THE SAME.

Take some charvil, pound it, then soak the juice and the herb in a gill of wine during one night; then strain it and give it to the patient. This is likewise a sovereign remedy for the cure of the dropsy.

NO. 93.—FOR THE SAME.

Three scruples of loadstone powder, taken with fennel juice, does surely cure the dropsy.

Glysters made of the decoction of thistle with urine, cure the dropsy, if that remedy be often repeated. Here follows another remedy well proved: take lard and wolfs liver one drachm and a half of each, they being pounded, mix them with syrup of sea wormwood, and make of the whole, eighteen pills; the patient afflicted with the dropsy must take three of them, in the morning fasting, and he will happily recover.

NO. 94.—FOR THE CURE OF THE EPILEPSY.

Take some of the after birth of a woman, wash and pound it well, after mix it with rye flour, in order to make bread with it, and bake it in an oven, the patient must take the weight of half an ounce of it, to eat, morning and evening, every first day of the first quarter of the moon.

The most part of the remedies that have been given for the apoplexy, may also be used in this case; therefore, they may be resorted to when necessary.

NO. 95.—AGAINST THE SAME.

As soon as a child is born, and before it take any thing else, if you make it swallow half a scruple of coral in powder, it is given for certain, that the child will never be afflicted with the Epilepsy.

NO. 96.—FOR THE SAME.

Take some wheat flour, that you will mix with dew, make of it a cake, which being baked, give it to the patient and he will get well.

NO. 97.—ANOTHER FOR THE SAME.

If you cut and open the young ones of the swallows of the first nest; you will find in their ventricle, two small stones, one of which is all of one color, and the other of several colours; before they touch ground, shut them up in a piece of goat or deer skin, and tie them on the arm and neck: they will cure the patient of the Epilepsy.

NO. 98.—FOR SORE EYES.

Pour into a large long necked bottle, one pint of water of roses, fennel water and euphrasia water, of each two ounces, thirty grains of cloves, the same quantity of rosemary flowers, half an ounce of sugar candy, conserve of roses; a pinch of provins roses. Stop your vessel well, put it to digest five or six days, and expose it to the sun from the month of June to the month of August; after which strain the liquor through a white linen cloth, without pressing it, and keep it in a glass vessel well corked. Make use of it in the disease mentioned above, in rubbing with it the afflicted part, and applying over it a linen cloth dipt in this water.

NO. 99.—FOR THE FLUX.

Mix vinegar and salt together, and drink a small quantity of it frequently, which will be an immediate and effectual cure. I had

opportunities of seeing this cure tried, and never knew it to fail. I have even known it to cure those whose bowels physicians had declared to be mortified.

NO. 100.—FOR THE BLOODY FLUX OR LOOSENESS OF THE BOWELS.

Take the juice of elder berries, when it is well ripe; pass them through a cloth or searge, in order the better to clean it, afterwards take some good wheat flour, as much as you think proper, and make use of that juice instead of water, to make of them some small loaves, which you will put in an oven with other bread to bake, taking care that they do not burn, owing to their small size: if they are not dry at the first baking, they must be put in the oven a second time, in order that they become as dry within as without, to be put in powder: afterwards, make of them some small packages, or papers, after having passed it through a fine seive. The dose and quantity to be given, is the weight of one ounce for grown persons; and for children the fourth part of that dose, say a quarter of an ounce.

NO 101.—FOR BLOODY FLUX AND LOOSENESS.

Take one gill of water of roses, infuse in it two ounces of roses of provins, during twelve hours, on some warm ashes, then strain it and put into it the weight of one ounce of rhubarb, cut in small pieces, infuse the whole twelve hours longer, then having strained and pressed it, put in a skillet over the fire, with two ounces of sugar, to make a syrup.

The patient must, on the first day, take two spoonfuls of it, fasting, and one spoonful every day, he must be one hour and a half after taking the dose, without eating, and continue the same treatment until the complaint ceases; this remedy is infallible.

NO. 102.—FOR BLOODY FLUX ONLY.

You must take in the morning, in an egg, cooked in the usual way, half a spoonful of a small seed of the silver weed, (a plant) that is usually found amongst seedsmen, after having well stirred and mixed it with the egg, and repeat the same two or three times; this performs wonders in a very short time.

NO. 103.—FOR LOOSENESS AND BLOODY FLUX.

Take some dock seed, (a sort of sorrel) that grows amongst the wheat, pound it, and put it in some broth: this is one of the most sovereign remedies.

NO. 104.—FOR THE SAME AT ALL TIMES.

Take a new laid egg, and beat well together the yellow and white; then with some wheat flour, make a kind of a cake, and while you are making the dough, grate a nutmeg amongst it: the dough being well made, and the whole well worked and stirred, bake this cake between ashes, then give it hot just out of the fire, to the patient, he must while eating it, drink two or three times, either wine or gin.

NO. 105.—FOR A LOOSENESS IN THE BOWELS.

Take some pounded panic, (a sort of corn,) and give it to the patient to drink with wine, and he will recover. The same panic, being boiled with goat's milk, and eat twice a day, morning and evening, will operate the same.

NO. 106.—FOR THE SAME.

Take some green horse beans, with their shells on, boil them with vinegar; eat them so with their shells, and the looseness will stop.

NO. 107.—FOR THE SAME.

Take some green oak acorn, bruise them well with their shells, and by the means of a still, draw some water from it, of which you will give to the patient: this remedy is very salutary.

The remedies that have been already described for the dysentery and looseness can likewise be used.

NO. 108.—TO STRENGTHEN THE LEGS AND FEET.

To make fomentations for the legs, thighs, and feet, make a decoction of sage, rosemary, thyme, lavender, cammomile flowers, and melilot, stewed in white or red wine; or else make some

lic with oak leaves, a little vinegar, and half a handful of salt.

This decoction has the virtue to subtilize, attenuate, cut, resolve, dissipate, and dry up the gross and viscous humours.

NO. 109.—FOR THE GOUT.

Take snake headed irs, scammony, white turbith, liquorice, cinnamon, half a drachm of each ; of the ingredients more or less, but always in equal quantity. Reduce the whole to powder, and pass it through a fine seive. The patient must take the weight of half an ounce, or one fourth less, that will depend on the difficulty he has of being purged. This powder must be soaked in the evening in half a glass of white wine, and on the following morning, mix the whole well, and let the patient take it, two hours after a broth. He must keep his room.

NO. 110.—FOR THE SAME.

Press some green olives before they are ripe, and extract the oil, which must be kept in a bottle, into which you put some henbane leaves, so that the oil covers them a great deal ; and the whole must be kept well shut up. This oil is excellent at the end of two months, it must be applied luke warm over the part afflicted with pains ; and it will appease them. It moreover prevents a pain, if it be applied when there is none.

NO. 111.—PLASTER FOR THE GOUT.

Oil of roses one drachm, Burgundy pitch, and black pitch, two drachms of each ; saffron two scruples ; opium dissolved in cow's milk, three scruples ; pepper one drachm ; and make of all these things a plaster in the usual way.

NO. 112.—CATAPLASM FOR GOUT.

Take some crumbs of wheat bread, and goat's milk, eight ounces of each, house leek juice, one ounce, the yolks of three eggs, and half a drachm of saffron ; make of the whole a cataplasm, and make use of it.

NO. 113.—AGAINST THE GONORRHOEA.

Take an equal quantity of sorrel, renufar, running thistles and strawberry roots; make a ptisan, or a tea of them.

NO. 114.—FOR INFLAMMATION OF THE REINS.

Take oil of roses, one drachm, white wax washed with rose water, and melted, two drachms; mix the whole together, and make an ointment of it, which you make use of in anointing the region of the reins.

NO. 115.—FOR INDIGESTION AND LUBRICITY OF THE BOWELS.

Take one ounce of dried orange peel, fine powdered; divide it into scruples, and take one scruple at a time, drink a glass of wine after it. This is a medicine not disgusting, not costly, easily tried, and if not found useful, easily left off. Do not take too much in haste; a scruple once in three hours, or about five scruples a day, will be sufficient to begin, or less, if you find any aversion. Best without sugar; if syrup, old syrup of quinces, but even that I do not like; I think better of conserve of sloes.

NO 116.—FOR JAUNDICE.

Cook a whole lime, under hot ashes; then cut it, and put it to soak in white wine; which the patient must drink in the morning, fasting.

NO. 117.—FOR THE JAUNDICE ON THE FACE, PROCEEDING FROM THE OVERFLOWING OF THE GALL.

Take a large white onion, in which you will make a hole on the germ, in throwing the green part away; put in that hole, the size of a chesnut of good treacle, bake it slowly before the fire, but take care it is not burnt or roasted, or get dirty amongst the ashes. When it will be done, put it in a white linen, and press well the juice out of it; the patient must drink it in the morning, fasting, and during twenty days. The jaundice and paleness will disappear,

NO. 118.—FOR THE YELLOW JAUNDICE.

Parch Indian corn, and eat freely of it; I have known this to cure when no other medicine would; I am a witness of three who have been perfectly cured by making use of the above.

NO. 119.—FOR THE SAME.

Take a large handful of the bark of the black alder, scraped or cut small, boil it in a quart of sound hard cider; let the patient drink freely of it when cold.

NO. 120.—FOR THE LOCK JAW.

Dip the part afflicted in a quantity of warm lye, as strong as possible; but if it be a part of the body, which cannot be immersed, rub the part afflicted with a flannel soaked in the lye. This has never failed in one instance.

NO. 121 —TO REPAIR THE LIVER WHEN UNPURE.

Take one handful of smeallage, the same quantity of sage, and colt's foot, pound it well, afterwards, put into it one quart of white wine, then strain the whole through a cloth. Let the patient take of it during three days, on the morning, fasting; and let him not eat for two hours after.

NO. 122.—AGAINST DEAFNESS.

The juice of cabbage, dropt in the ear, affords a wonderful relief against deafness, that may come through causes of sickness.

NO. 123.—FOR BRUISED NERVES.

Take some deer marrow, and melt it with French brandy, then rub the painful parts with it.

NO. 124.—AN OINTMENT FOR NEW SORES.

Take half a pound of Venice turpentine, laurel oil, one drachm sage juice, two drachms, gum elemi, half a drachm; with which make an ointment.

NO. 125.—AN OINTMENT FOR SORES AND PRICKINGS.

Turpentine of Venice, two drachms, white wax and oil of roses, two scruples of each, bethony juice, half a pound; of the whole, make an ointment secundum artem.

NO. 126.—AN OINTMENT FOR FALLS, WOUNDS, CONTUSIONS, CUTS, &c.

Take four pounds of mice dung, pound them, and put them in a new pot glazed inside, add to it one pound of fresh butter; boil the whole during a short time, and strain it through a linen, and in this liquid, put two ounces of turpentine, and finish boiling the whole. This is a wonderful ointment.

NO. 127.—FOR PALSY.

Make a decoction of apex, one ounce of it, and boil it a little longer than one quarter of an hour; the patient must take a glass of it before meals. This remedy must be continued one year before it can perform a perfect cure.

NO. 128.—FOR THE SAME.

Take a young kid, dress it, stuff its belly with one pound of cloves, roast it on the spit, and with the grease that will come out, rub the afflicted part. Instead of a kid, take a very fat duck, and prepare it in the same manner as mentioned above for the kid. This remedy is well approved.

NO. 129.—FOR THE PLEURISY.

The remedy for this disease is easy. A cataplasm made with dregs of wine, must be put on paper as hot as the patient can bear

it on the afflicted part. This affords a wonderful relief, which is followed with a general perspiration, and a cure will in a short time take place.

NO. 130.—FOR THE SAME.

This remedy is not less efficacious than that which we have just given, it consists in making a cold infusion, during three or four hours, in a gill of white wine, some fresh and yet warm balls of horse dung, after having broken them in pieces. The wine is afterwards strained, and given to the patient, who will not fail to get cured, through perspiration.

NO. 131.—FOR THE INFLAMMAION OF THE LUNGS AND SPLEEN.

The patient must constantly drink of a tea made with speekwell; a little sugar must be added to it. The patient must not be bled. This potion or tea provokes the urine.

Or else, make a tea with viper's grass, and let the patient drink constantly of it. This tea causes a great perspiration and the spitting of the abscess, should there be any in the breast. This remedy is also good for the small pox.

NO. 132 —FOR THE PALSY.

Take young dogs whose eyes are not yet open, and they are only eight days old. Then, put them all alive into an earthen pot, with a quart of white wine, and bethony, sage, rosemary, hysops, marjoram, wormwood, camomile and melilot leaves; add to it some very white hog's lard, cover well the pot and put it into a very hot oven, or else consume the whole on the fire, then strain it like a jelly, and make use of it as hot as the patient can bear it. On opening the pot, you must put half a pound of brandy into it.

NO. 133—FOR PAINS IN THE BREAST.

Take one pint of water, put it into a pan or kettle, and add to it one handful of wheat bran with the size of an egg of fine sugar; let the whole together take one boiling; then strain it, and let the

patient drink this water as hot as he can bear it, This remedy must be repeated several times a day.

NO. 134.—FOR A WEAK BREAST AND LUNGS.

Make often use of damas raisins, boiled in wine during one quarter of an hour, and in a short time your breast will recover its strength.

NO. 135.—CABBAGE SYRUP FOR THE BREAST AND LUNGS.

Take some cabbages, and pound them with their leaves and stalks, strain it, and add the same weight of very good honey. Boil the whole together, and scum it continually, and when it does not scum any more, the syrup will be done. One spoonful of it is sufficient to be taken, fasting.

NO. 136.—TO EXTIRPATE WARTS.

Take an equal quantity of brown soap, and spittle; mix the whole together, and make a plaster of it; apply it on the warts and leave it on them twenty-four hours; then take it off, and at the same time, the warts and roots will come off.

NO. 137.—FOR WARTS ON THE HANDS.

Pound some horse radish roots, and wash the warts with it two or three times a day,

NO. 138.—TO CAUSE THE WARTS, IN WHATEVER PART THEY BE,
TO FALL OFF.

Take a sheep lung, newly killed, let the blood drain off from it, and as soon as there is no more blood on it, press the lung in a press, some water will come out; keep this water in a glass bottle and rub the warts with, and they will disappear.

NO. 139.—TO PURGE THE BRAIN.

Take some goats milk, and draw it in through your nose, three or four times; this will entirely remove from the brain all obstruction,

NO. 140.—FOR HEAD ACHE.

The water that comes out of walnut tree, after an incision has been made in them, the quantity of one ounce drank at intervals, appeases in a short time the head ache, however violent.

NO. 141.—FOR BLEEDING AT THE NOSE.

Put one drop of vinegar in the ear of the person whose nose is bleeding, on the side of the nostril through which the blood comes out. This will stop it.

NO. 142.—FOR LOSS OF BLOOD IN WOMEN.

Take some pervinca, let it get dry, and reduce it to powder. The patient must take the weight of half an ounce of it, with some broth, fasting.

NO. 143.—PLASTER AGAINST HARDNESS OF BREASTS.

It is made with horse beans meal, and barley meal, half an ounce of each, flax-seed and sangreen meals, six drachms of each, and one scruple of saffron.

NO. 144.—FOR TUMOURS AND INFLAMMATIONS OF THE BREASTS.

Take a small handful of plantain and mallow leaves, boil them in a sufficient quantity of rose water until it is consumed to a thickness, afterwards, add to it two ounces of barley flour, one ounce and a half of oil of roses, of the whole form a plaster.

NO. 145.—FOR SWELLINGS, ARISING FROM DROPSY OR OTHER CAUSES

You must have a great quantity of elder bark, boil them with three quarts of white wine, until they are reduced to two quarts;

afterwards strain and press them hard, and drink of it morning and evening.

NO. 146.—PLASTER FOR A SWELLING IN THE KNEES.

Take some cow dung, and vinegar, mix them together and boil them until some thickness; then apply this plaster on the afflicted part; the swelling will soon disappear, as it has often been experienced.

NO. 147.—FOR SWELLINGS THAT CAUSE PAINS.

Take the crumbs of rye bread, and some vinegar, boil them together, and apply it warm on the sick part, and the pain will cease.

NO. 148.—FOR THE SAME.

Boil some flaxseed with ewes milk, and apply it often and warm, on the swelling.

NO. 149.—AGAINST RHEUMATISM.

You must boil on the fire a glass of the urine of the person afflicted with it, then, bathe the afflicted part; afterwards, dip a linen folded double in the urine, apply it on the pain and tie it up. This remedy consumes and dissipates the humours entirely.

NO. 150.—FOR THE SAME.

The afflicted part must be rubbed before the fire with a linen, and take some elder oil, in which five or six drops of spirits of wine have been mixed, rub with it the pain every morning and evening with a greasy towel, and applied on the painful part, when the patient is going to bed.

NO. 151.—FOR SCALDS AND BURNS.

As soon as the accident has happened, take a plaster of tar, the size of the wound, and apply it to the place affected. By this

simple application, which has been often tried and never found wanting, the inflammation will be found to subside, and the pain to cease in a few minutes.

No. 152.—FOR SORE THROAT.

Take some rye flour, boil it in a pint of milk, during half a quarter of an hour, then take two lily onions, and make a cataplasm of it, which must be applied quite warm about the throat : it causes a wonderful effect.

No. 153.—TO DISSOLVE THE APOSTHUMES AND ABSCESSSES THAT COME ABOUT THE THROAT.

You must have some dry ass dung, and swallow dung, put them in powder, which you will mix with warm water. The patient must very often make use of it as a gargle. This remedy is very certain.

No. 154.—FOR FALLEN PALATE.

If through a great distillation of humours or fluxions, the palate is fallen ; cabbage juice applied on the head, has the virtue to draw it up and put it again in its place.

No. 155.—FOR THE TREMBLING OF THE HANDS.

Mugwort soaked in water, is very useful to strengthen trembling hands, by washing them often with it.

No. 156.—AGAINST VAPOURS AND HEADACHE.

Bathing the legs with luke warm water, grape vine leaves, ap. peases in a short time the vapours, and the head ache.

No. 157.—COMPOSITION OF THE VENEREAL POWDER.

Take senna in powder, lignumvitæ, sarsaparilla, two scruples of each ; cinnamon and aniseed, one scruple of each. The dose to

be taken is one drachm infused in some white wine during the night, and drink it in the morning with the powder.

NO. 158.—FOR SWELLED TESTICLES.

Take some rue, and having pounded it, apply it on the parts, and the swelling will immediately disappear.

NO. 159.—FOR TUMOURS IN TESTICLES.

You must have four ounces of the four following kinds of flour, to wit; barley, rye, flax and ervum, boil the whole with beer: that being done, add to it one ounce of camomile oil, roses, camomile and melliot one drachm of each. Of the whole make a cataplasm to be applied on the sick parts.

No. 160.—FOR THE SAME.

Nothing is better for worms in children, than the worms themselves dried on a red hot tile, and reduced to powder. Give this powder to the sick children, and it will expel all those with which they are troubled.

NO. 161.—WINE AGAINST WORMS, CUTTING PAINS AND LOOSENESS
IN THE BOWELS.

Take twenty pomegranates, after they are pounded put them in a vessel with some thick wine. Then stop up the vessel, and do not open it but at the end of thirty days: after which time, take some of this liquor fasting, and you will be free from all those diseases or indispositions.

NO. 162.—FOR ULCERS IN THE MOUTH.

You must take some honeysuckle leaves and distill them. Make use of the water to gargle the ulcers in your mouth and throat with it, and they will infallibly get cured.

NO. 163.—AGAINST THE FLUX AND URINE.

You must have some tender points of oak leaves, and boil them in wine; then pound them, make a cataplasm, and apply it on the patient's privy member, and he will in a short time be cured.

NO. 164.—WATER FOR HAND WORMS.

Make a lye with flaxseed; with which you must wash your hands during eight days.

Mintjuice is also very excellent, in rubbing your hand with it.

NO. 165.—WATER FOR ULCERS AND SORES.

Take one ounce of long aristolochy, put it in powder or only bruised; four ounces of common sugar, one quart of white wine; boil the whole in an earthen glazed pot, until the consummation of half a pint upon the whole; then strain it and keep this water for use when necessary.

NO. 166.—WATER TO TAKE THE REDNESS, ITCHING AND BLEAREDNESS OF THE EYES.

Take two ounces of water of roses, the same quantity of white wine; mix together, and rub the eyes with it.

NO. 167.—FOR REDNESS AND WEAKNESS IN THE EYES.

Apply on the afflicted eyes, in form of a small cataplasin, some single daisies, withered on a hot shovel, and bruised, before they are applied to the eyes.

NO. 168.—AGAINST THE FEVERS OF CHILDREN.

It will not be found less strange, which has been tried several times, that by putting a large cucumber near a child at the breast, having a fever, when the child is a sleep, the fever will leave him without fail.

NO. 169.—FOR DEAFNESS AND DIZZINESS.

Peal Garlic, dip it in honey, and put it into the ear, with a little black wool. Lie with that ear uppermost, and put the same into the other ear the next night. Do this, if necessary, for eight or ten nights.

NO. 170.—FOR GRAVEL OR STONE.

Take lobelia, violets, and rib wort, of each a handful. To this, add one pint of white lie, and boil the composition ten or twelve minutes; then strain off the decoction, and add one pint of Holland gin. Take as much as the stomach will bear, six times a day. At the same time, take a glass of the juice of onion tops every night.

NO. 171.—ANOTHER.

Take two pounds of hard root, called ox balm; two pounds of queen of the meadow, called by the Indians, Sofia; two pounds of ginsang root, with the roots washed clean and cut them fine. Then boil them half a day with clear water, in a tight covered pot. You must not skim, strain, or suffer it to boil over, nor let it remain in an iron vessel over night.

This compound is for two quarts. When this syrup is settled, drain it off, and add a pint of Holland gin, and a pound of loaf sugar. Take this syrup as hot as it can be drank, as much, and as often as the constitution will admit, until the gravel or stone is dissolved. This will be found a stone dissolving application, and should it cut or dissolve the stone or gravel so fast as to clog the neck of the bladder, as is often the case, the patient must take diuretic syrup.

NO. 172.—ANOTHER.

Make a strong tea of the herb called heart's ease, and Jacob's ladder, and make a very strong tea, drink plentifully of it, and it is a most certain remedy.

NO. 173.—ANOTHER.

Infuse one ounce of wild parsley seed in a pint of white wine, for twelve days.—Drink a glass before breakfast, fasting, for three months, and breakfast for three months on agrimony tea.

NO. 174.—ANOTHER.

Pour hot water to a good handful of gravel weed, and as soon as the strength is drawn out, give the patient two gills; and in an hour give another, and so on till it begins to operate. Then once in two hours, and as the gravel begins to come away, in three hours, then once in six and so continue until well. This I consider the most sovereign remedy, that has ever been found out.

NO. 175.—FOR BILIOUS COMPLAINTS.

Take the leaves of tobacco, boil them in pure water until very strong. To one quart of this liquor, add three gills of rum, and three gills of sale molasses; then bottle it up, and take as much of this as the stomach will bear, once a day. This wholly prevents the bilious cholic.

NO. 176.—FOR ASTHMA.

Put two teaspoons full of pulverized lobelia into a pint of rum, and use it for a bitter morning and evening. Half a gill will be sufficient at once.

NO. 177.—ANOTHER.

Take two ounces of spignard root, two ounces of sweet flag root, two ounces elecampane. Beat them fine in a mortar, and add a pound of honey, beat well together. A teaspoon full is a dose, three times a day.

NO. 178.—ANOTHER.

Take lobelia, blood root, the roots of blue violets, of each a tea spoon full when pulverized. Boil them fifteen minutes in six gills of water. Strain out the powders, and add to the decoction, an equal quantity of good rum, and take six times a day, sufficient to nauseate or make sick at the stomach, but not puke.

After taking the above, make a syrup of garden celendine, dog-machy bark, hog brake, and white Solomon's seal root. Make a syrup of this by boiling a handful of each in twelve quarts of water down to one; then add spirits and honey, and it is fit for use. Take two glasses a day, fasting; that is, two hours before breakfast or supper.

NO. 179.—ANOTHER.

Beat saffron blows, fine, and take eight or ten grains every night, on sliced apples.

NO. 180.—FOR SPITTING BLOOD.

Take two spoons full of nettles every morning, and a large tea cup full of the decoction of nettles at night, for a week. This presently stops either spitting or vomiting blood; or half a tea spoonful of Barbadoes tar, or a lump of sugar at night. It most commonly effects a cure at once.

NO. 181.—ANOTHER.

Take a pound of yellow dock root, dry it thoroughly, pound it fine, boil it in a quart of sweet milk, strain it off, and drink a gill three times a day, or pound balm of Gilead buds with brown sugar, to that degree that you can make them into pills. Take four or five of these at going to bed, and it wonderfully helps the soreness in the stomach.

NO. 182.—POULTICE FOR OLD SORES.

Scrape carrots, with them on a fire shovel, until very soft; apply it to the sore and it takes out the inflammation. It is an excel-

lent poultice for sore breasts ; and perhaps there is nothing better that can be applied to the eyes that are sore and inflamed.

NO. 183.—FOR AN ESSENCE.

This is an excellent essence, and good for all sorts of inward weakness, pain in the side, stomach or breast, coughs &c.—Take twenty pounds of fir boughs, one pound of spignard, and three pounds of red clover. Put them into a still with ten gallons of cider ; then draw off three gallons, and drink half a glass night and morning.

NO. 184.—FOR INWARD PILES.

Swallow a pill of pitch fasting. One pill generally cures the first trial.

NO. 185.—FOR BLEEDING PILES.

Lightly boil the juice of nettles with a little sugar, and take two ounces. It needs repeating.

NO. 186.—FOR AGUE.

Take a handful of hops, boil them in a pint of water, and drink of this decoction just before the cold fit comes on. It will stop the fit for this time, if not throw it off. Proceed in this way a few times, and it will effect a cure.

NO. 187.—FOR SALT RHEUM.

First, cleanse the blood by making a decoction of dogmachy bark, and ground hemlock, (not cicuta) Add one pint of gin to a quart of this decoction, and take a glass three times a day. After taking this one week, make an ointment by simmering six common frogs in one pound of hog's lard or fresh butter, two hours. With this ointment frequently anoint the part affected.

NO. 188.—ANOTHER.

Take blue flag root, river willow, the bark of the root, boiled in pure water very strong. Strain and add hog's lard, and continue boiling until the water is all evaporated, and when cold it is fit for use. Anoint the parts affected, twice a day, until well.—It also cures the piles.

Steep the root of cockawash jammed up in cold water, six or eight hours; then wash the parts affected, with the decoction three or four times a day, and drink two glasses a day of this steeped in another vessel for that purpose. It is a certain cure.

No 189.—FOR SORE NIPPLES.

When the infant stops sucking, apply a plaster of the balsam of fir, and it will cure in four days.

NO. 190.—FOR ITCHING HEELS.

Take tallow and rub the part affected with it; rub it in by a hot fire at night going to bed, and repeat it three or four times. A certain cure.

No. 191.—FOR BLOODSHOT EYES.

Apply boiled hysop and rue, as a poultice. This is a sure remedy, as frequently proved.

No. 192.—FOR CLOUDED EYES.

Take a drachm of powdered Bethony every morning in milk. This is infallible.

NO. 193.—FOR DULL SIGHT.

Steep the bag wherein the musk of a skunk is contained, in half a gill of water. Dip a soft rag in the water gently daub the eyes two or three times a day.

NO. 194.—FOR FILMS ON THE EYE.

Mix the juice of ground Ivy, that is, gill-go-by-the-ground, with a little honey. Drop it in morning and evening.

NO. 195.—FOR HUMOURS IN THE EYES.

Apply a few drops of refined sugar, melted in brandy, to the eye; or boil a handful of bramble brier leaves, in one quart of spring water to a pint. Drop this frequently into the eye. This also cures cankers or any sores.

NO. 196.—FOR INFLAMED EYES

Apply as a poultice, boiled roasted or rotten apples, warm; and this will hardly fail; or wormwood tops, with the yolk of an egg. This is a fine remedy.

NO. 197.—ANOTHER.

Stamp and strain ground ivy, and daisies, an equal quantity. Add a little rose water and loaf sugar, and drop a drop or two at a time in the eye, and it takes away all manner of inflammation, smarting, itching, spots, webs, or any other disorder.

NO. 198.—FOR FROZEN LIMBS.

Plunge them into cold water until the frost is out, and then anoint them with grease.

NO. 199.—FOR UVULA RELAXED.

Bruise a cabbage leaf, and lay it on hot, on the crown of the head. Repeat it if necessary, in two hours. I never knew it to fail.

NO. 200.—FOR THE BLOODY FLUX.

Take a puke of mullen leaves pounded, add to them a little water on the leaves, press out the juice, clarify it by scalding it over the

fire then add to it a quart of braudy, and let the patient drink a table spoonful every hour.

NO. 201 —ANOTHER.

Or take blood weed called horse tail, and comfrey roots, boiled together, sweetened with honey, and drink often of it.

NO. 202.—ANOTHER.

Or take sweet flag root, boiled in milk, and sweetened with honey.—Drink often of this medicine, taking a gill at a time.

Drink often of a tea made of white pine bark, spikenard and everlasting.

No. 203.—FOR PALSY OF THE HANDS.

Wash them often in a decoction of sage, as hot as you can bear. I know of nothing better ; or two or three spoonsful of mustard seed in a quart of water, and wash often in this as hot as may be.

No. 204.—FOR PALPITATION OF THE HEART.

Take the saw dust made from a pitch pine knot, the tops of vervine and agrimony, of each a handful, pulverize the herbs, and put them into two quarts of wine, let them infuse twelve hours, and it is fit for use, Take a small glass three times a day, and it seldom fails.

BOTANIC GARDEN.

GARDEN CELENDINE; PILE WORT; OR FIG WORT.

1. The virtues of this herb are known by experience, that the decoction of the leaves and roots, doth most wonderfully help the piles and hemorrhoids; as also, kernels by the ears and throat, called kings evil, or any other hard wens or tumors. Celendine, made into an oil, ointment or plaster readily cures the piles, hemorrhoids or kings evil. The very herb borne around the body next the skin, helps in such diseases, though it never touch the place aggrieved. With this I cured a lady of the kings evil, broke the sore, drew out a gill of corrupted matter and cured it without any scar in one week.

CINQUEFOIL; OR FIVE FINGERS.

2. This spreads and crawls far upon the ground, with long slender strings like straw berrries, which take root again and shoot forth many leaves made of five parts dented about the edges, and somewhat hard. The stalks are slender, leaning downwards and bear many small yellow flowers with some yellow threads in the middle, standing about a small and green edge; which, when it is ripe, is a little rough, and contains small brown seeds. The root is of a blackish brown colour, seldom so large as one's little finger but grows long with some threads attached to it. It grows by wood and path ways on piles, and in almost every place. This herb has great virtues. If you give twenty grains of the powdered herb in wine or wine vinegar, it will seldom miss curing an ague of whatever nature or kind. The juice thereof drank, about four ounces at a time for certain days, cures the quinsy and yellow jaundice, and taken for thirty days cures the falling sickness.—The roots boiled in milk and drank, is a most effectual remedy for all fluxes either in men or women. A decoction of the root boiled in vinegar, eases the tooth ache. The juice and a little honey helps the hoarseness of the throat, and is very good for a cough.—The root boiled in vinegar helps all knots, kernels, hard swellings and inflammations and St. Anthony's fire.

COMFREY.

3. This is a well known garden herb, it is good against all inward hurts, bruises and wounds: that is, the decoction drank, cureth the same. It is good for women that have in moderate courses, and a syrup of the root is effectual in all these complaints. The root being pounded and applied outwardly, is good for wounds, ruptures, broken bones, knotted breasts, hemorrhoids, inflammations, gout, pained joints, gangrenes.

YELLOW DAISY, OR CROW FOOT.

4. This herb grows in abundance in our country, on meadow or pasture grounds. It grows from one to two feet high, has a roundish leaf and blows in the forepart of summer—the blows are of a bright yellow colour. The herb, if bruised and applied to the skin, draws as perfect a blister as the Spanish fly: but the better way is to mix it with salve. The juice is good on application to palsied limbs and cold swellings: it stimulates and produces a degree of excitement.

WAKE ROBIN, MARCH TURNIP; OR CUCKOO POINT.

5. This herb, if a tea spoon full of the powdered root be given, is a present sure remedy for poison and plague. A little vinegar with it allays the biting taste upon the tongue. The said powder taken in wine as other drink, procures urine and brings down women's courses, and purges them effectually after child bearing; taken with sheeps milk, it heals inward ulcers. The leaves either green or dry, or the juice of them will cleanse all manner of rotten and filthy ulcers in any part of the body. The decoction of the root dropped into the eyes, cleanses them from any film or skin, clouds or mists that begin to hinder the sight, The juice dropped into the ear eases the pain of ear ache.

DANDELION.

6. This herb is well known and grows frequently in all meadows and pasture grounds, and is of an opening and cleansing quality and therefore very effectually opens obstructions of the liver and gall. It wonderfully opens the passages of the urine both in old and young; it powerfully cleanses imposthumes and inward ulcers. The decoction of the roots or leaves in white wine, or leaves boil-

ed as pot herbs, is very effectual. It is good for a person drawing towards a consumption, and many times will produce a healthful state.

DOVE'S FOOT OR, CRANE'S BILL.

7. This herb has divers small, round, pale green leaves, cut in about the edges much like mallows, standing upon long reddish hairy stalks, lying in a round compass upon the ground. It has very small bright, red flowers, of five leaves a piece, when they seed they form short beaks or bills.

The herb is very good for the wind cholic, as also to expel the stone and gravel in the kidneys. The decoction is good for inward wounds and bruises and to stay the bleeding thereof, and will expel congealed blood. The decoction in wine is a good foment to ease the pain of the gout. It is of singular use for ruptures and bursts in either old or young.

ELECAMPANE.

8. This herb needs no description. The fresh roots of elecampane preserved in sugar, or made into syrup is very effectual to warm a cold windy stomach, and to help the cough, shortness of breath, wheezing of the lungs. The dried root powdered and mixed with sugar, answers the same purpose, and is good for a stoppage in the urine, or of women's courses. The root and herb, beaten and made into beer and drank daily, strengthens the sight of the eyes wonderfully.—The decoction of the roots in wine, drives forth and kills all manner of worms that people are troubled with. It is good to fasten loose teeth, spitting blood, cramps, gout, cankers, &c.

EYE BRIGHT.

9. Eye bright is generally known. If this herb was but as much used as it is neglected, it would half spoil the spectacle maker's trade. The juice, distilled water, or decoction of eye bright dropped into the eyes for a number of days, helps all inflammation of the eyes and dimness of sight; almost any way prepared, it is a powerful remedy for weak sore eyes, and to strengthen those that are dim through age.

FEATHERFEW.

10. This is an excellent herb to open obstructions of the body, and a great strengthener of women, and will remedy such infirmities as a careless midwife has been the cause of; in such cases it will do them all the good they can wish for. A decoction of the herb made in wine or of the flowers, or a syrup, or apply the boiled herb outwardly to the parts, does wonderfully help. It is good against the gravel, to cleanse away phlegm to cure melancholy, head ache, ague cholic.

FENNEL

11. Fennel is good against wind in the stomach; is useful to increase milk in women's breasts and make it wholesome for the child, also to prevent sickness in the stomach, shortness of breath and wheezing; to open obstructions of the liver, and to cause urine. The seeds and roots are much used in drinks and broths to make people more spare and lean that are too fat.

WINTER GREEN.

12. This is a singular good herb, and especially to heal green wounds. A salve made of the green herbs stamped, or the juice boiled, with hogs lard or with sallad oil and wax, and some turpentine added to it, is sovereign salve, and highly extolled by the Germans, who affirm it to heal all manner of wounds. A decoction of the herb, or in wine, and given to drink, does wonderfully help ulcers, fluxes, women's courses, bleeding of wounds, inflammations rising upon pains of the heart, cankers or fistulas, and the distilled waters answer the same purpose.

ARTICHOKES.

13. The decoction of the juice of artichokes, is good to open the passages of the urine, and of course is good for stone in the bladder.

HEMP.

14. This herb is good for something else besides making halters of. The seed steeped, is excellent for wind in the stomach; it

opens obstructions of the gall, and is good against all fluxes, and is very good to kill the worms either in man or beast. The juice dropped into the ears, kills the worms in them, and draws forth ear wigs. A decoction of the root is good to allay inflammation in the head or any other part, or pains of the gout, joints, shrinking of sinews, pains of the hips.

HYSOP.

15. Hysop is known to be a garden herb. Hysop boiled with reu and honey, helps cough, shortness of breath, and wheezing, and rheumatic complaints. It helps to destroy worms in children, and being taken with figs and nitre, helps the dropsy. Being boiled with wine, it is good to wash inflammations; and takes away the black and blue spots that come by bruises, or falls; it is an excellent remedy for the quinsy, or swellings in the throat; it helps the tooth ache, being boiled in vinegar, and gargled therewith, the hot vapour of the decoction conveyed into the ear, eases the inflammation and singing noise of them. The oil of it kills lice, and helps the itching of the head. The green herb bruised with a little vinegar does quickly heal any cut or wound.

JUNIPER BUSH.

16. The juniper berries are a most admirable counter poison, and as great a resister of the pestilence as any that grows. They are excellent against the bitings of venomous beasts; they cause urine; it is a powerful remedy against the dropsy, even if the ashes of the bush be made into lye and drank, cures the disease.—It provokes the terms in women, helps the fits of the mother, strengthens the stomach exceedingly, and expels wind. Indeed there is scarce a better remedy for wind than the chymical oil drawn from the berries. Those that know not how to extract the oil, may eat ten or twelve of the berries each morning, fasting. They are admirably good for a cough, shortness of breath and consumption, pains in the bowels, ruptures, cramps, and convulsions. They give speedy and safe delivery to women with child. The ashes of the wood made into lye, cures the itch, scabs, and leprosy. The berries break the stone, procure appetite that is lost.

HOPS.

17. Hops are so well known that they need no description. Every good housewife is acquainted with them. The decoction of

the hops is good to open obstructions of the liver and spleen, to cleanse the blood, and help costiveness; is good against the gravel. They help to cure the French disease, and all manner of scabs, itch, and other breakings out of the body; as also tetters, ring-worms and spreading sores. Half a drachm of the seed in powder taken in drink, kills worms in the body, helps the terms in women, eases the head ache which arises from heat. A syrup made of the juice and sugar, cures the yellow jaundice, tempers the heat of the stomach and liver.

HORSETAIL.

18. This is of the rush kind that grows upon land, and are many sorts, but the sort that I shall here recommend is the bushy top jointed every where, resembling a horse tail, from whence it took its name. It is very powerful to staunch blood whenever, either inward or outward. A decoction of the herb being drank, it stops all manner of fluxes, and heals inward ulcers. It is good to heal a green wound, it cures ruptures in children, and it does ease the inflammation in the fundament.

ST. JOHN'S WORT.

19. It is well known that John's wort is a singular wound herb as any other whatever, either inward wounds, hurts or bruises, to be boiled in wine and drank, or prepared into oil or ointment, bathe or taken inwardly. It has power to open obstructions, to dissolve swellings, to close up wounds, and to strengthen the parts that are feeble. The decoction of the herb and flowers, but of the seeds especially, in wine, helps all manner of spitting and vomiting blood: be it by any vein broke inwardly, by bruises, falls, or whatever provokes the terms. Two drachms of seed made into powder and drank in broth, does expel choler, or congealed blood in the stomach; it is good for all kinds of agues. A decoction of the seed is good for the sciatica, falling sickness, and the palsy.

LIVER-WORT.

20. Common liver-wort grows close, and spreads upon the ground in moist, shadowy places; with many sad green leaves, as it were sticking flat, one upon another, very uneven, cut in on the edges, and crumpled,

It is a singular good herb for all diseases of the liver, both to cool and cleanse it. It is a singular remedy to stay the spreading of the tetters, ring-worms, sores, and scabs. It is good against surfeits of the liver.

MALLOWS.

21. This herb grows in every country, and almost in every dooryard. There are two sorts of mallows, but their virtues are the same. A decoction of the herb and root, made in wine, is opening to the body, and good in agues. A decoction of the seed made in milk, or wine, does marvelously help the phthisic, pleurisy, and other diseases of the chest. The juice drank in wine, or the decoction of them therein, does help women to speedy and safe delivery. Pliny said, that whoever drinks a spoonful of the juice in a morning, will be free from any disease that day. The leaves bruised and laid upon the eyes, takes the inflammation from them. The decoction of the leaves and roots, helps all sorts of poison; it is good for scabby heads, scalding, St. Anthony's fire, sore mouth, and throat. The green leaves bruised, with nitre, draw out thorns and prickles in the flesh. The high mallows is more effectual in all the before mentioned diseases.—The decoction of the leaves, is used in clisters, to ease all pains of the body, and open the passages. The decoction in white wine, is good for the king's evil, or swelling in women's breasts. A decoction of the root or juice, is good to give persons fainting, through loss of blood, and apply the same, mixed with honey and rosin, to the wound. Mallows bruised and boiled in milk, and the decoction for constant drink, boiled in water, cures the dysentary.

MOTHER-WORT.

22. This herb is so well known, that I shall not describe it. There is no better herb to drive melancholy vapors from the heart; to strengthen it, and make a merry, cheerful, blithe soul, than this herb is. Besides, it makes women joyful mothers, and regulates them after delivery, as they should be. The powder thereof, to the quantity of a spoon full, being drank in wine, is a wonderful help to women in sore travel. It is good for worms in children, it helps cramps, and convulsions.

SPEARMINT.

23. Spear-mint has a healing, binding, and drying quality; and therefore, the juice taken in vinegar, checks bleeding. It is good to repress the milk in women's breasts. The bruised herb applied with salt, cures the bite of a mad dog. The often use of the decoction, stays women's terms. It is good to wash the head of young children, that have breaking out sores, or scabs thereon. The powdered herb being taken after meat, helps bad digestion. Mint and worm wood, being boiled in but little water, and the herbs wet with spirits and bound on the bowels of the child, has a wonderful effect in bringing away worms.

MULLEN.

24. Mullen is well known. A small quantity of the root given in wine, is good against lax and fluxes. The decoction of the herb is good for those that are burst, for cramps, and convulsions, and for those that are troubled with an old cough. The decoction of the root in wine or water, is good against the ague; it opens obstructions of the bladder and reins, when one cannot make water.

Three ounces of the distilled water, drank morning and evening, for some days together, is a most excellent remedy for the gout. A decoction of the root and leaves, has great effect in dissolving the tumors, swelling, and inflammations of the throat. The seeds and leaves boiled in wine, and applied, draw forth speedily, thorns and splinters from the flesh, eases the pains and heals them. The same laid on any member newly sprained, or out of joint, or newly set, takes away all swelling and pain thereof.

MUSTARD.

25. This herb is very good in all diseases of the chest and lungs, hoarseness of voice, and by the use of the decoction thereof, for a little space, those have been recovered, who had utterly lost their voice, and almost their spirits. It is good for coughs, shortness of breath, jaundice, the pleurisy, pains in the back and loins, for cholic, being also used in clisters. The seed is good against poison, for the sciatica, gout and joint aches, sores, cankers in the mouth, throat, or behind the ears, for hard and swelled breasts.

HOARHOUND.

26. A decoction of the herb with the seed, or the juice of the green herb, taken with honey, is a sure remedy for those that are pursey, or short winded, or that have a cough, and are going into a consumption. The green herb boiled with milk, and a spoon full taken every morning, will restore a person far gone in the consumption. It is an excellent thing for women in travel, and for those that have taken poison. The leaves used with honey, are good for foul ulcers, and will stop running or creeping sores. The juice with wine and honey, helps to clear the eye-sight. The decoction is good for those that have bad livers; it kills worms, and is good for the asthma.

CATNIP, CATMINT, OR NEP.

27. The blows of catnip dried and powdered, and taken with honey for thirty days, is a certain cure for the phthisic. It is a good remedy; that is, the decoction of the herb for women to regulate their terms; it is good for pains in the head, catarrh, or dizziness thereof, and is used for colds, coughs, and shortness of breath. The juice made into an ointment and applied, is good for the piles.

NETTLES.

28 Nettle tops, eaten in the spring, consume the phlegmatic superfluities in the body of man, that the cold and moistness of winter has left behind. An electuary made of boiled roots, leaves or juice, is a safe and sure remedy to open the pipes and passages of the lungs; it is good to prevent the pleurisy: the same helps the swellings of the almonds of the ears and throat. The decoction in wine is good for women, and to open obstructions of the body. The decoction of the herb, or juice, or of the roots, is excellent to wash old rotten and stinking sores, fistulas, or gangrenes; it is of great use to bathe benumbed parts of the body, and gouty limbs.

WHITE-OAK.

29. The leaves and bark of the oak, are both binding and drying. The decoction of that bark and the powder of the cup that holds the acorn, will stay vomiting, and spitting of blood, bleeding at the mouth, and other fluxes of blood: the oak buds before they

break out into leaves in decoction will do the same. The same is good in pestilential fevers, for it resists the force of the infection, it cools the heat of the liver. A decoction of the leaves is one of the best remedies for women's weaknesses that I know of.

OATS.

30. Oats fried with salt; and applied to the side takes away the pains, The meal of oats boiled in vinegar and applied, takes away freckles, and spots in the face, or other parts of the body.

ONIONS.

31. Onions being roasted in the embers, and eaten with honey and oil, do help an inveterate cough. The juice of onions is good for a scald or burn; and used with vinegar, takes away all blemishes, spots, and marks of the skin; and dropped into the ears, eases the pains and noise in them. Leeks are wild and very common, and as good an herb as grows, to eat in the spring to physic the blood, and is an excellent guard against epidemical fevers, and other disorders. The root and herb, being boiled and applied, is an excellent remedy for the piles.

PARSLEY.

32. Parsley, a garden herb well known, is of an opening nature, and therefore good to open obstructions of the liver and spleen. It provokes urine mightily, especially if the roots be boiled and eaten like parsnips: is of course good for the gravel in the bladder; it is good to give children troubled with wind, and it takes away inflammation of the eyes. The herb being fried in fresh butter and applied to women's breasts, takes the pain, and swellings thereof. Take of the seeds of parsley, fennel, amsey and caraway, of each one ounce; of the roots of parsley, burnet, sassafras and caraway, of each an ounce and half; let the seeds be bruised and the roots washed and cut small; let them lie all night and steep in a bottle of white wine, and in the morning let them be boiled in a close earthen vessel, until a third part be evaporated, which being strained and clear, take four ounces morning and evening, first and last, abstaining from drink after it the three hours. This will open obstructions of the liver and spleen, and expel the dropsy and jaundice by urine.

THE BEECH TREE.

33. The leaves and flowers of the beech tree, made into a syrup, does exceedingly help weak and debilitated constitutions. Two spoons full of the syrup may be taken every morning. The leaves bruised and laid on the bowels, kills worms ; it does the same in decoction, being drank for that purpose. The decoction is gently physical. A syrup made of the flowers, as the syrup of roses is made, is a gentle puke, and spends waterish and hydropical humors by the continuance thereof. The flowers made into a conserve, works the same effect. The meat of the stones steeped, does most wonderfully help all pains in the bowels.

PENNYROYAL.

34. Pennyroyal warms the coldness of any part to which it is applied ; being boiled, it helps forward the terms of women regularly. It stays vomiting ; being taken in water and vinegar, mingled together, and being mixed with honey and salt, it cleanses phlegm from the stomach. The green herb bruised and put into vinegar, cleanses foul ulcers, and takes away the marks and bruises upon the eyes. Boiled in wine, with honey and salt, it helps the tooth ache. Mints and pennyroyal put into vinegar, are excellent against swoonings and faintness.

PLANTAIN.

35. This herb grows in every place in meadows, by-paths, that it needs no description. The juice clarified and drank for several days together, prevails against all pains in the bowels, and stops all kind of fluxes. It is good to stop spitting of blood, or the making foul and bloody water, by reason of ulcers in the kidneys or bladders ; it is held a special remedy for the phthisic, or consumption of the lungs, or ulcers of the lungs, or coughs that come of heat.—The decoction, or powder of the roots or seeds, is much more powerful for the aforesaid purposes, than the leaves. A decoction of the root is effectual to cure agues of any kind. The clarified juice, dropped into the eyes, cools the inflammation, and takes away the web ; and dropped into the ears, restores the hearing. The decoction or juice, is good for old foul ulcers, and for cankers in the mouth, or sores in any part. It is good to apply where any bone is out of joint, to hinder inflammations, swellings and pains that rise thereupon. The dried lives, powdered and

taken in honey or molasses, will destroy worms. One part plantain water, and two parts of beefbrine, boiled together and clarified, (that is, all the scum taken off,) is a most sure remedy to heal all manner of scabs or itch, tetters, ring worms and shingles. Finally, plantain is a singular herb to heal wounds or sores, either inward or outward.

POPLAR TREE.

36. Poplar is very cooling. Therefore, the leaves bruised with vinegar and applied, helps the gout. Poplar buds are used by women to beautify their hair, and by bruising them with fresh butter, and setting them in the sun, makes an ointment that is good for inflammations of every kind.

QUEEN OF THE MEADOW.

37. The stalks are reddish, they grow three or four feet high, having at the joints, large winged leaves, standing one above another, being hard, rough or crumpled, much like an elm leaf having also, some smaller leaves with them of a sad green colour on the upper side, and greyish underneath, of a pretty sharp scent and taste, somewhat like burnet. At the top of the stalks and branches, stand many tufts of small white flowers, thrust thick together which smell much sweeter than the leaves. The root is blackish on the outside, and brownish within, and has a strong scent, but nothing so pleasant as the leaves and flowers.

Queen of the meadow grows in moist land and near rivers and water courses. It is good to stop all manner of bleedings, fluxes, vomitings and courses, and also other weakness. It is said to stop agues and make a merry heart, for which purpose, some use the flowers and some the leaves. It helps speedily those that have the cholic. It helps all ulcers that are cankered, rotten and hollow, and fistulas, and sores in the mouth or secret parts. The leaves, when full grown and laid on the skin, draw a blister.

GARDEN REW.

38. Rew is a counter poison. The seed taken in wine, is an antidote against all dangerous medicine or deadly poison; it will destroy worms in children, and is good (being bruised with wormwood and wet with spirits and applied to the bowels,) to fetch away

worms. The herb being often made use of in drink, will cause abortion, and will stop venereal inclinations. A decoction, made of the herb, with some dried dill leaves and flowers, eases all pains inwardly, to be drank, and outwardly to be applied to the pained parts.

RUPTURE WORT.

39. Rupture wort spreads very many thready branches round about upon the ground about a span long, divided into many other smaller parts, full of small joints set very thick together, whereat come forth two very small leaves of a fresh yellow green colour, branches and all, there grows forth also a number of exceeding small yellowish flowers, scarce to be discovered from the stalks and leaves. The seeds are as fine as dust. The root is very long, thrusting down deep into the ground, a little bitter and sharp withal in taste.

Rupture wort has not its name in vain, for it is found by experience to cure the rupture in children and other people, by taking a drachm of the powdered herb every day in wine. It helps all other fluxes, either of men or women, vomiting also. It is good for the gravel and stone, and the same also helps all griping pains in the stomach or belly or the obstructions of the liver, and cures the yellow jaundice; it likewise kills worms in children, and it dries foul ulcers or spreading sores.

RYE.

40. The bread and leven of rye meal, ripens and breaks imposthumes, biles, and other swellings.—Rye meal moistened with vinegar, put into a bag and laid upon the head, does very essentially ease the pain.

SAFFRON.

41. It is a great strengthener of the heart, and only ten grains must be taken at a time. It quickens the brain, helps the consumption of the liver, difficulty of breathing, and is an excellent thing in epidemical diseases, as pestilence and measles, and a notable remedy for the yellow jaundice.

SAGE.

42. A decoction of sage causes urine, stays the bleeding of wounds, and cleanses foul ulcers and sores. Orpheous says three spoons full of the juice of sage taken fasting, with a little honey, stays the spitting of blood, of them that are in a consumption. Take of ginger and spignard, each two drachms, of long pepper twelve drachms; make this into pills, and take a pill or two morning and evening. It is good for all pains in the head, and cleanses away humors; it helps pains in the joints, is good for the lethargy and falling sickness, and it enlivens the spirits. Sage taken with worm wood, is good for the bloody flux, and is a regulator of women's terms. Sage juice dropped into the ears kills the worms therein, and is good to help the memory. The juice of sage drank with vinegar, is a good medicine for the plague at all times, and an excellent wash may be made with sage, rosemary, honey suckles and plantain, by adding a little honey and allum, for sore throat or mouth cankers, in any part of the body.

SOLOMON'S SEAL.

43. The great white solomon's seal is found by experience to be available in the cure of wounds of every description, by making use of the pounded root, or in salve. The decoction of the root will stay vomiting, and plagues in general of any kind, and is most excellent to apply the pounded root or bathe with the decoction, any joint that is out of place, or bone broken; it will cause it to knit soon, and will dispel congealed blood. It is good in syrups made with nunk roots and spirits, for the consumption and other weakness of the breast and stomach. It is good to cleanse the face from freckles or spots on the skin, leaving the skin smooth and fair, and is much made use of by the Italian ladies for this purpose.

SANICLE; OR, BLACK SNAKE ROOT.

44. It grows in moist rich land and generally in meadows, bearing a number of burs on the top of the plant. The root is blackish, and of a strong good smell. The decoction of the herb or root, or the root in powder, or made into an ointment, is good to use as the case may require, for green wounds, ulcers, imposthumes, inward bleedings, swellings, ulcers in the mouth, throat and privates, and it helps to stay immoderate fluxes. The root put into good rum and drank, has cured a deep consumption. This root and herb,

may be reckoned amongst the best of medicine, for weakness and debility, being a great strengthner of the system.

SCABIOUS.

45. Scabious grows up with many hairy, soft, white, green leaves, some of which are but very little, if at all, jagged on the edges, others are very much rent and torn on the sides, and have threads in them, which, upon the breaking, may be plainly seen; from among which, rise up many hairy green stalks, three or four feet high, with such hairy green leaves on them; but more deeply and finely divided, and branched forth a little. At the tops thereof, which are naked and bare of leaves for a good space, stand round heads of flowers, of a pale bluish colour, set together in a head.—The root is large and runs down into the ground, and of a reddish cast. It grows in meadows and in old fields and amongst corn. There are three or four sorts of scabious, but they are similar and their virtues are the same.

Scabious is very effectual for all sorts of coughs, shortness of breath, and all other diseases of the lungs and breast, ripening and digesting cold phlegm, and other tough phlegm, and humors, avoiding them by coughing and spitting. Drink the clarified juice in the morning, fasting, with a drachm of mithridate and molasses, frees the heart from infection, pestilence and epidemical complaints then let the party go to bed and sweat. The green herb pounded and applied to any bile or swelling, eases the pain and will draw it to a head. It helps all sores proceeding from the French disease. The juice of scabious, made up with the powder of borax and camphire, cleanses the face of freckles or pimples, and the head washed with the same cleanses away dandruff, scurf, sores, itch and the like. The bruised herb applied to the flesh, draws forth splinters, thorns, arrow heads or the like, lying in the flesh.

SHEPHERD'S PURSE; OR SHEPHERD'S POUCH, TOYWORT; OR CACE WEED.

46. This little herb has sundry names, and is an excellent pot herb. The root is small and white, and perishes every year. The leaves are small and long, of a pale green colour, and deeply cut in on both sides, amongst which spring up a stalk which is small and round, with small leaves upon it even to the top, and the flowers are white, and very small.

It is of a dry, cold binding nature. It helps all fluxes, spitting of blood, and those that make bloody water, and being bound to

the wrists and soles of the feet, it helps the yellow jaundice.—The herb made into a poultice, and applied, helps inflammations and St. Anthony's fire, and the juice dropped into the ear, eases the pain thereof.—A good ointment may be made of this herb for all wounds and especially those in the head.

COMMON SORREL.

47. Sorrel is a cooling herb, and therefore it helps inflammations and heat of blood in agues, sickness and fainting, and to refresh over spent spirits, that have had fits of fever and ague, and to quench thirst and cause an appetite in decayed stomachs. It resists the putrefaction of the blood, kills worms, and is a cordial to the heart. But the seed is most effectual, being more drying and binding. The roots, seeds and herbs, are good for the poison of a serpent.

A decoction of the flowers made in wine, helps the black jaundice and inward ulcers. A syrup made of the juice of sorrel and fumatory, is an excellent remedy to kill those sharp humors caused by the itch. The juice with vinegar and applied outwardly, is good for scald head or tetters, ring worms, &c. It helps the kernal in the throat and the juice is good for sores in the mouth. The herb pounded and roasted, being applied to a humour, blotch or bile, will quickly fetch them to a head and break them.

WOOD SORREL.

48. Wood sorrel is of the same nature, and is good for all the aforementioned disorders, and is thought to be more effectual in hindering the putrefaction of the blood, and tempering inflammations. It is good to stay vomiting, and is excellent in pestilential and contagious fevers, cools inflammations in the throat, and helps them much.

STRAWBERRIES.

49. Strawberries when green are cold and dry, but when ripe are cold and moist. The berries are excellent to cool the liver, blood and spleen, or any choleric stomach, fainting spirits, or quench thirst. They are not good to take in settled fevers. The leaves and roots boiled in wine and water, stays the bloody flux. The juice of the berries distilled, is a sovereign remedy for the

panting and beating of the heart, and is good for the yellow jaundice. The juice, or the decoction of the herb or root, dropped into, or washed with the same, helps to cure foul ulcers, in any part of the body; is good to fasten loose teeth, and helps spongy and foul gums. The juice is good for inflamed and sore eyes; it is good for sores and humors on the body, redness of the face, or spots or other deformations of the skin, and will make it smooth and fair.

It is a very wholesome, cooling herb, and good with bread and milk; but to some people they are poison, and they cannot make any use of them whatever.

SMALL HOUSE-LEEK.

50. It grows with many trailing branches upon the ground, set with many thick, flat, roundish, whitish, green leaves, pointed at the ends. The flowers stand many of them together. It grows upon stone walls and mud walls; upon the tiles of houses and amongst rubbish; upon stumps or almost any place, with but little earth or moisture. It is of a cold nature and something binding, and therefore good to stay defluxions, especially such as fall upon the eyes. It expels poison, resists pestilential fevers, being exceeding good for tertian agues. You may drink the decoction of the herb for all the aforementioned diseases. It is so harmless an herb that you can hardly use it amiss. Being bruised and applied to the place, it helps the king's evil, and many other knots in the flesh, and also the piles.

TOBACCO.

51. Tobacco is found by experience to be good to expectorate tough phlegm from the stomach, chest and lungs. The juice is an excellent remedy for worms. You may sweeten, distill or make it into a syrup, and it answers the same purpose.—It eases the pain in the head, and the griping pains in the bowels. It helps to expel the stone in the kidney or bladder, and casts it off by urine. The seed thereof is very effectual to cure the tooth ache, and the ashes of the herb to cleanse the gums, and make the teeth white. The herb bruised and applied to the place aggrieved with the king's evil, is very effectual in nine or ten days. Manardas says it is a counter poison to any venomous serpent. The juice is good to kill lice in children's heads.

The juice applied to any green wound or cut, cures it very effectually, and will cleanse and heal old sores.

SPIGNARD ; OR, PETIMORAL.

52. This is good in syrups for consumptive complaints. The roots boiled in wine or water, and drank, helps the stoppage of the urine, swellings and pains of the stomach, pains in the mouth, and all joint aches. If the powder of the root be taken with honey, it breaks tough phlegm, and dries up the rheum that falls upon the lungs. The roots are accounted very effectual against the sting or bite of any venomous creature. The roots pounded and applied to an old sore or wound, (the root must be boiled and the pith taken out,) will do wonders, when other things fail. The sore must be washed in the water in which the root was boiled, at every dressing.

GARDEN TANSY.

53. There grows not a better herb for women than this. It regulates them just as though it was made wholly for their use. It will prevent miscarriages. It will consume the cold and moist humors that are caused by winter, which effect the bodies of men and women. The juice of tansy drank in wine, is good to open the passages of urine, and expel wind. The seed is good to give children for worms, and the juice is effectual, being boiled in oil. It is good for shrunk sinews occasioned by cramp. You may use it in decoction, in syrup, in powder, or in wine, and the juice is equally good, as the case may require.

LADIES' THISTLE.

54. It is the common thistle that grows almost every where. It is thought to be effectual for agues, to cure phlegm and to open obstructions in general. It is good against the jaundice and dropsy, pains in the sides, and many other pains and gripings, and cleanses the blood exceedingly. And in spring, take the leaves, cut off the prickles and boil them as common greens, and eat them in this way ; it will change the blood as the season changes, and that is the way to be safe from disease.

HONEY SUCKLE ; OR, MEADOW CLOVER.

55. If the herb be boiled and used as a clister, it eases the griping pain of the gout. The herb boiled, made into a poultice and applied to inflammations, will ease them. The juice dropped into the eye, takes away the pain and web, and helps eyes that are blood shot. The seed and flowers boiled in water, and made into a poultice, with some oil and applied, helps hard swellings and inflammations.

VIOLETS.

56. The blue violets grow spontaneously in mowings, by the side of streams, and it has a leaf about the bigness of a cent, of an oval form, and somewhat rough. It bears a pale blue blow, and blows early in the summer. The root is about an inch long, and appears jointed, and when chewed in the mouth, becomes slippery like the white of an egg. This root is used in the bilious cholic, dysentary, coughs, &c. It eases the pain of the gravel, stoppage of urine, and is an excellent remedy in debilitated cases of almost every kind. A drachm weight of the dried leaves or flowers, purges the body of choleric humors. The dried flowers are accounted among the cordial drinks, especially where cooling cordial is necessary. They are good for plasters and poultices, for inflammations and swellings.

WHEAT.

57. To eat the green berries of wheat is hurtful, as it breeds worms in the stomach. Pliny says that the corns of wheat roasted on a shovel, and eaten, is a present remedy for those that are chilled with the cold. The oil pressed from it between two small plates of iron, heals all tetters, scald head and ring worms. The same oil is good to put into hollow ulcers, and will heal them up, and is good for chapped hands and feet. Hot wheat bread, being applied for an hour at a time, three days together, perfectly heals the kernels in the throat, commonly called king's evil. The meal boiled in vinegar helps the shrinking of the sinews, says Pliny. And mixed with vinegar and honey boiled together, heals all freckles, spots and pimples on the face. Wheat flour, mixed with the yolk of an egg, honey and turpentine, does draw, cleanse and heal any bile, plague, or foul ulcer. The bran boiled in vinegar, and applied to swelled breasts, helps them and takes away the inflammation,

WORM WOOD.

58. The herb is as hot as your blood, and no hotter, and is a wonderful remedy for worms, if you take the powdered leaves in honey or molasses. The juice is equally as good, for it provokes urine, and helps surfeits and swellings, and restores appetite that is lost. It helps the yellow jaundice, and is a great preserver of health. Put the herb into a chest among clothes and the worms never will touch them. The juice will prevent rats or mice from eating or gnawing where ever it is applied, and it cures the cholic. A drop of the juice will prevent any harm from those that have drank too much spiritious liquors.

YARROW, CALLED NOSE BLEED; OR THOUSAND LEAF.

59. An ointment of them cures wounds, and are fit for such as have inflammations. Boiled in white wine, it stays all manner of fluxes, and the decoction being drank, as also the bloody flux. The ointment of it is not only good for green wounds, but also for green wounds, but also for ulcers and fistulas — The decoction of the herb applied to the head, stops the shedding of the hair, and it helps such as cannot hold their water. The leaves chewed in the mouth, helps the tooth ache. The virtues of this herb are drying and binding, and is good of course, for all fluxes of the body, if rightly applied.

SELF-HEAL; OR, SICKLE WORT.

60. The common self-heal is a small, low creeping herb, having many small roundish leaves, somewhat like the leaves of wild mint, of dark green colour, without any dent on the edges; from among which, rise divers square hairy stalks, scarce a foot high, which spread sometimes into branches, with divers leaves set thereon, up to the top; where stand brown spike heads of small brown leaves like scales and flowers set together, almost like the heads of cassidony, which flowers are gaping and of a bluish purple, or more pale blue, in some places sweet, but not so in others. The root consists of many strings or fibres downward, and spreads strings where it increases. The small stalks with the leaves creeping upon the ground, whereby it is made a great tuft in a short time. It is found in woods and fields every where, and it flowers in May. — Self-heal is a notable wound herb, and is a special herb either taken inwardly in syrup, or applied outwardly as a poultice. If it be

accompanied with sanicle and other wound herbs, it will be effectual, and to wash or inject it into ulcers outwardly, where there is cause to repress hot humors and inflammations, swellings or the like; or to stop the blood in any wound, it is used with success; and also to cleanse the foulest sores, and cause them speedily to heal. The juice with oil of roses, to anoint the temples and forehead, is very effectual to remove the head ache. The German proverb is herein verified; that he needs neither physician nor surgeon, who has self-heal and sanicle.

SOW THISTLE.

61. Sow thistle is cooling and something binding, and is very fit to cool a hot stomach and to ease the gnawing pains thereof. The milk that is taken from the stalks, is good for those that are short winded. Pliny says it has caused the gravel and stone to be voided by urine, and that the eating thereof, helps a stinking breath. Three spoonsful of the juice taken in white wine warmed with some oil put therein, causes women to have so easy and speedy delivery that they will be able to walk presently after. The herbs bruised, or the juice is profitable to cure inflammations in the eyes, or any other place, or the heat and sharpness of humors in the privates.—It is excellent for women to wash their faces with, and clear the skin, and give a lustre thereto.

VERVAIN; OR, VARVINE.

62. The common vervain has somewhat long, broad leaves next the ground, deeply gashed about the edges, and some deeply dented or cut all alike; of a blackish, green colour on the upper side, and somewhat gray underneath. The stalk is square, branched into several parts, rising about two feet high, especially if you reckon the long spike of flowers at the tops of them, which are set on the sides one above another, and sometimes two or three intermixed; after which, come small round seeds. The flower is small and gaping, of a purple blue colour, and white intermixed, and the root is small and long, but of no use. It grows generally throughout, way sides and waste grounds.

Vervain is hot, dry and bitter; opening obstructions, cleansing and healing. It helps the yellow jaundice, dropsy and gout, and the leaves being boiled and the decoction being drank, is good against the bite of a serpent, or any venomous beast.

It kills and expels worms in the belly; is effectual in all diseases

of the stomach and lungs conghs, shortness of breath, expels the gravel and stone, and used with some honey, heals all old ulcers and fistulas in the legs or other parts of the body, as also the ulcers in the mouth, or used with hogs lard, is good for the piles and hemorrhoids. The distilled water of the herb, when in its full strength dropped into the eyes, cleanses them from films, clouds or mists that darken the sight; and the said water is very powerful for all the above mentioned diseases, inward or outward, whether old sores or green wounds.

TIME.

63. It is an herb so generally known that it is not necessary to describe it. This is a notable strengthener of the lungs, and there is not a better herb for the chincough. It purges the body of phlegm, and is very excellent for shortness of breath. It kills worms in children, and being an herb of Venus, it provokes the terms, and gives safe and speedy delivery to women to travel. You need not fear to use it, as it is a harmless herb. An ointment made of it takes away hot swellings and warts, and helps the sciatic and dull sight, and is good for the gout. It eases the pains in the loins and hips, and the herb taken any way inwardly comforts the stomach much, and expels wind.

MARIGOLDS:

64. It is an herb of the sun and under Leo. They strengthen the heart exceedingly, and are good to be used in the small pox and measles.—The juice of marigold leaves, mixed with vinegar, is good to bathe any hot swelling; it eases the pain and gives relief immediately. The green or dried flowers, are good in possets and broths and drinks, as a comforter of the heart and spirits. A plaster made with the dry flowers in powder, hog's fat, turpentine and rosin, and applied to the breast, strengthens and succors the heart infinitely in fevers.

SWEET MARJOREM.

65. Our common marjorem is warming and comfortable in cold diseases of the head, stomach, sinews and other parts taken inwardly, or applied outwardly. The decoction thereof being drank,

helps all diseases of the chest, and asthmatic complaints, and is good for female complaints.

The powdered herb, in honey, applied to a bruise, draws out the black and green spots, and is good for inflammations of the eyes, being mixed with fine flower and applied to them. The juice dropped into the ears, eases the pain and singing noise in them. An ointment made of the juice, hog's lard, turpentine and the yolk of an egg, is good for stiff and swelled joints and shrunk cords.

MOUSE-EAR.

66. Mouse-ear is a low creeping herb, of a small hairy leaf, and being broken gives a white milk. The blows are something like dandelion flowers, a little red on the under side. It grows on dry and sandy ground, not more than a span high. This herb is under the government of the moon. The juice of the herb taken in wine is good for the jaundice, and is excellent for the tormenting pain of the gravel, and all other griping pains of the bowels. It is a singular wound herb, both inward and outward. It helps the bloody flux and is excellent for woman that flow too much. A syrup made of the juice and sugar, is good for those that have a cough and phthisic, and the same is good for ruptures and bursts. The pounded herb is good to apply to any fresh wound. The distilled water is available in all the above mentioned diseases, and to wash outward wounds and sores, by applying wet cloths thereon.

DWARF ALDEER.

67. This herb dies every year with the stalks on the ground, and arises afresh in the spring, and is like the other alder both in form and quality, though not of the same taste, it being nearly that of sassaferilla; rising up with a four square, rough, hairy stalk, four feet high. The winged leaves are somewhat nearer than the common alder, otherwise very much like them. The flowers are white, with a dash of purple, standing in umbels like other alder, but more sweet in scent. After which, some small blackish berries full of juice, while they are fresh wherein there lies hard kernels or seeds. The root creeps under the upper crust of the ground; springs afresh in divers places, being the bigness of one's finger or thumb, in ground that suits the plant. The dwarf alder is more powerful than the common alder, in opening and purging choler and phlegm from the stomach. It helps the gout, piles and women's diseases, colours the hair black, helps the inflammation of the eyes, pains in the ears, the bite of a serpent or mad dog,

burnings and scaldings, wind cholic and stone in the bladder. Either leaves or bark stripped upwards, causes vomiting; but downward it purges. Dr. Butler, in a manuscript of his, commends dwarf elder very much for dropsies; and has of late been found to be a most effectual remedy, and speedily cures those in the last stages of that disorder. The decoction in wine or without, either root or branch; but the root I believe to be the most effectual, being made or taken in a decoction it works off by urine.

MULBERRY TREE.

68. This herb is well known in every country where it grows, and needs no description. The bark of the root of mulberry in powder, kills the broad worm of the body. The juice or the syrup made of the juice of the berries, helps all inflammations or sores in the mouth or throat, and the palate of the mouth when it has fallen down.

The juice of the leaves is a remedy against the bite of a serpent. The leaves beaten with vinegar, are good for a burn. A decoction of the herb and leaves is good to wash the mouth and teeth when they ache. If the root be slit a little and a hole be made in the ground, so as to set a vessel under in harvest time, it will catch a certain juice, which being hardened, is fit for use, it will help the tooth ache and dissolve knots in the flesh, and purge the bowels. A branch of the tree taken when the moon is in the full, and fastened to the wrist of a woman's arm whose courses come down too much, will stay them in a short time.

GOLDEN ROD,

69. This herb rises up with small, brownish, round stalks, two or three feet high; having on them many narrow and long leaves, of a dark green, very seldom any dents about the edges, or any stalks beside the main branch; yet divided at the top into many small branches, with small yellow flowers on every one of them, all of which are turned one way. It dies down to the ground every fall, and springs up anew in the spring.

Venus owns the herb, and it is said it will restore beauty that is lost. It provokes urine and expels the gravel and stone. A decoction of the herb or juice is effectual for inward bruises. It stays bleeding in any part of the body, and is no less prevalent in all ruptures and bursting, being drank or outwardly applied. It is

a sovereign wound herb, both for inward ulcers, green wounds old sores, ulcers, and quickly cures them. A decoction to wash the mouth is good to fasten loose teeth.

TAMERACK TREE.

70. It is so well known where it grows that it needs no description. The leaves boiled in wine and drank, are good to stay the bleeding of the hemorrhoidical veins, spitting of blood, to stop women's courses, help the jaundice cholic, biting of a serpent, and the bark is as effectual for all the aforementioned diseases.

The balsom is contained in small sells which may be found by cutting into the tamerack.—This balsam has a wonderful efficacy in curing wounds, bruises in the breasts, coughs, weak eyes, &c. A dose for an adult is but three or four drops, which is as much as the stomach will bear. This balsam spread upon leather, makes an excellent strengthening plaster for the stomach and back, and for joints that are effected with rheumatism.

ROSA SOLIS; OR, SUN DEW.

71. It has many small, hollow leaves, somewhat greenish, but full of certain red hairs.—There is a dew upon the leaves in the hottest, dry weather; yea, the hotter the day the moister they seem. It grows on marshy, wet places.

Sun dew is accounted good for those that have the salt rheum, distilling on the lungs, which breeds a consumption; therefore the distilled water, in wine, is good for the same, and will be of a gold colour. The same water is good for all the diseases of the lungs, and comforts the fainting spirits. The leaves applied to the skin, will raise a blister. It is good for sickish qualms in the stomach, &c.

POPPY.

72. The garden poppy heads and seeds made into a syrup, is frequently used with good success, to procure rest and sleep for those that are sick and feeble; and to stay catarrh, and defluations of the hot rheums from the head into the stomach and upon the lungs; causing a continual cough, and forerunner of the consumption. It helps hoarseness of the throat, and when one has lost their voice, which the oil of the seed does likewise. The empty

shells of the poppy are usually boiled in water, and given to procure rest, so do the leaves in the same manner; and also, the head and temples, being bathed with the warm decoction of the oil of poppies. The green heads or leaves bruised and applied with a little vinegar, or made into a poultice with barley meal or hog's grease, cools and tempers all inflammations, and also the disease called St. Anthony's fire. Opium made of the juice of the poppy, is good to put into hollow teeth.

PILLITORY OF THE WALL.

73. It rises up with many brownish red, weak clear and almost transparent stalks, about two feet high; upon which grow at the several joints, two leaves somewhat broad and long, of a dark green colour, which afterwards turn brownish; smooth on the edges, but rough and hairy as the stalks are also at the joints, with the leaves from the middle of the stalks upwards, where it spreads into branches, stand many small, pale, purple flowers, in hairy, rough heads or tufts; after which, come small, black, rough seeds, which will stick to any cloth or garment that shall touch them. The root is rather long with many fibres thereat, of a dark reddish colour which abideth the winter, but the stalks perish.

It groweth wild generally through the land, about the borders of fields, by the side of walls, and among rubbish, and it flowers in June. A decoction of this herb, with sugar or honey, is a singular remedy for an old dry cough, and shortness of breath. The juice is good to expel the gravel-stone in the kidney or bladder. It is often used with other herbs for injections, to ease griping pains in the back, sides and bowels. The decoction of the herb being drank, eases female complaints, and is good, mixed with honey, to gargle a sore throat. The juice dropped into the ears will ease the pain of them. The juice is very effectual to cleanse fistulas, and to heal them up safely. The herb bruised and applied with a little salt, is excellent to heal any fresh wound; and if it be bound on three days, you will need no other medicine. A poultice made of this herb and mallows, boiled in wine, with wheat bran and bean flower, with some oil put therein, and applied to any bruised sinew, tendon or muscle, restores them in a very short time to their strength, and will both ease the pain and dissolve the congealed blood. The juice of pillitory clarified and boiled into a syrup with honey, and a spoonful being drank every morning for a week, and if any person ever has the dropsy, let them come to me and I will cure them gratis.

DOGMACHEMOSE.

74. This shrub grows ten or fifteen feet high, and commonly in clusters. The bark is of a darkish green and smooth, with large leaves and rather rough. Amongst the clusters are seen many straight, green, smooth, whips or sticks. Some people call it dogmackly. It is an Indian name, however, and is a good medical bush.

A decoction of the bark is very effectual to cleanse the blood and strengthen the system, where it has become vitiated by the king's evil, cancer, consumption, and many old debilitating complaints which have been of long standing.

BLUE COHOSH.

75. This is an Indian herb. It grows in moist uncultivated ground, fourteen or fifteen inches high, and may be known by the blue berries on the top of the stalks about the bigness of a buck-shot, sometimes there are four on a stalk; and it may be found by the berry in the winter when the snow is not deep.

Blue cohosh is gently physical, and is good to open obstructions in general, and is a most effectual remedy for the canker in the mouth, a mouth water being made of the root in decoction, and sweetened with honey.

BLOOD ROOT.

76. This herb grows in rich uncultivated lands, and is generally known in countries where it grows. The leaf is roundish and the root is red, and sometimes the bigness of one's finger. This root is excellent for all diseases of the lungs and other complaints; but it being a powerful medicine, should be given in small doses and frequently repeated. The root in powder is generally used. This powder is good to sprinkle into old filthy sore ulcers and fistulas, cleanses them and causes them to heal.

The green root pounded and applied to a cancer, soon destroys its malignity, and effects a cure. But the patient should drink a tea made of five fingers while the cure is progressing.

YELLOW DOCK.

77. The decoction of yellow dock is very effectual in cleansing the blood of humors of every kind. It helps those that are falling in a dropsy, especially at the beginning of the disorder. It is most effectual against the poison of serpents, and good against all diseases of the brain and continual head ache.

PIUNKUM; OR NUNK ROOT.

78. This herb grows on rich intervale lands, by the side of streams, and on low ground that is washed by rivers in the spring. It has a small round leaf and very fine, with notches on the edge of the leaf. There are a number of leaves standing on small foot stalks. It grows not more than six or seven inches high, and the root is of a purple colour, and has a very good smell,

There is no better herb grows in our country than this, to stop blood and heal a fresh wound. A decoction of this herb being drank, is good for a consumptive cough. The herb and root bruised and put into spirits or in clear water, and drank as a bitter, is an excellent remedy for the consumption.

BALM OF GILEAD.

79. The buds of this tree put into wine and drank, are very strengthening to those of a weak constitution. The buds and deer's tallow make an excellent salve for broken breasts, and for any fresh wound. I have thought there was no salve could equal it.

CRAMP ROOT; OR, IRON ROOT.

80. Cramp root steeped and the decoction being drank, cures night sweats, and is an excellent remedy for the cramp in the stomach, and else where, it may be put into spirits. Brandy is thought to be the best. It is also good against fevers. Cramp root is found under white or black oak or beach trees, and adheres fast to the root of the tree, under which it is found. It rises up a small stalk, something like convulsion root, eight or ten inches high, and has no leaf except a kind of husk, which lies close to the stalk. Upon the top is a bowl as large as a bean, similar to the pod in which the

seed of tobacco is contained. And this pod is full of seed that has so near resemblance of tobacco seed, that it is difficult to distinguish it apart. The root is a rough, jagged, uneven burl or knot, growing fast to the root of the tree under which it is found and cannot be separated without an axe. Upon the top of the root and round about, are many buds, that are ready to rise in the spring.

OX BALM, YELLOW ARTICHOKE, HARD ROOT; OR TOAD ROOT.

81. The top of this herb resembles the artichoke, and has a strong aromatic smell. It grows in moist, rich soil, generally about two feet high. The root is as hard as the white oak root, resembling a bumble bee's nest, of a knotty shape.—This root is used in cases of dysentery and night sweats.

FEMALE ROOT AND FLOWER.

82. It often grows by the side of ponds, has a leaf, and blossoms like cowslips. But it grows single, one root or stalk by itself, and some smaller than the cowslips. The leaves are green, and the blossoms yellow. This is one of the finest of roots for the female use in the world.—The ladies would do well to gather this in summer.

BLUE FLAG; OR, FLOWER DE LUCE.

83. The blue flag is so generally known, I shall not describe it. Its use is in ointments, and to put into spirits a small quantity in case of worms. It is good to relieve pains in the head, and properly prepared, makes excellent physic; but being a powerful root, must be carefully handled.

PRIDE, FIRE WEED, WHIPCYWOG, HORSETAIL; OR, WHITE TOP.

84. It grows about waist or shoulder high, one stalk from the ground, and has a very bushy top. The stalk is round, hairy, and the leaves are long, narrow and pointed; of a dark green, with three small notches on each side of the leaf. The leaves stand thick upon the stalks, nearly from the bottom. This herb is used in stopping immoderate evacuations of blood from any part of the system, by making use of the juice of the green herb or the dry in

decoction. It should be gathered before it blows out, and the juice got out, and add a little spirits to preserve it; or the herb gathered and dried to be taken in decoction.—It grows in old fields on dry land.

DRAGON'S TOOTH.

85. This is a little dwarf turnip, found late in the fall under an old bed of March turnips, but many of them are not larger than a pea. They extract all their powers from the old turnip.—They are called by some Doctors, the royal vegetable caustic. When these are dried and powdered, they make the easiest caustic ever applied to human flesh.

These powders will kill all honey comb sores, and all proud or fungus flesh, in any sore whatever.

LOCKAWASH.

86. This I cannot describe very accurately; however, it grows in swamps, and wet rich soil, and along spring brooks that run through meadow lands. It grows two or three feet high and blows late in the fall, with a pale blue blossom.—It grows in bunches, and I think blows out the latest of any herb. By this I think it may be known, for the blows stand thick and may be seen at a distance. There is another kind which grows on dry land, and called the frost blows by the bee hunter. The blows are similar, but lockawash grows in the swamp or wet ground.

The root of this herb jammed and steeped in cold water and drank, and the parts affected with the salt rheum washed with the same, is a certain cure, and the root is good in syrups.

OSIER; OR, DOGACAME.

87 This bush grows nine or ten feet in height with a small round leaf, and the bark is as green as grass. It bears a blue berry when ripe, and is generally known by the name of dog wood.—The small branches that die turn as yellow as gold. The bark of this bush is physical, though crabbed. I never make much use of it.

GARDEN HEMLOCK; OR, CICUTA.

88. It is known where ever it grows, and is used in making ointments for cancerous humors, and by infusion by steeping in cold water to wash the tumor, the juice boiled down to the consistency of a pill. This is a powerful herb, and great care must be taken in the use of it.

DYSENTERY ROOT.

89. This root grows on dry, open land, and about old fields. It rises up five or six feet high and has a long slim leaf growing two thirds up the stalk. The stalk is round and hard, and it branches out towards the top into a number of branches, and bears a purple blow, similar to a peach tree blossom. The blow being off, you may see a long pod about the bigness of a darning needle. The root creeps along under the ground similar to dwarf elder, and being chewed in the mouth has a peppery taste, and is as slippery as slippery elm bark. The root must not be boiled, but steeped upon the coals moderately, till it becomes like starch. In some delicate cases in the female, the root ought to be put into wine.

MEADOW PLANTAIN.

90. It grows every where in meadows, three or four feet high, and has a number of branches towards the top; and the blossom has a near resemblance to May weed blows. The leaf is not more than three inches long, but in shape resembles a plantain leaf, and the stalks are round and hairy. The fine roots have a little sharp taste like pepper. This herb is used in curing dysentery, and is good in all cases of immoderate evacuations of blood.

The top of this herb is for use only, and should be gathered when in the blow; or a convulsion root is described.

BEECH DROPS.

91. These are commonly known. The root and top is for use, and it is excellent for fits in children. It is a good tonic medicine, bracing and strengthening the system, and may be used in wine as a cordial with others of a similar nature.

COHOSH, RED AND WHITE.

93. It is generally known or may be, by a little inquiring, and is peculiarly adapted to female complaints, each colour to its own colour. She that reads, let her understand.

WANDERING MILK WEED; OR, INDIAN HEMP.

93. It grows by the side of rivers and near ponds, and is a milk weed. It grows three or four feet high, bears a silk pod like silk grass, though smaller, and the stalk is reddish. The root is composed of a number of white strings, four or five inches long. The root is anthelmintic or a powerful remedy for worms, the root being powdered and given in molasses, or the decoction drank.

GENSION; OR, GENTION.

94. It grows on dry warm hill lands, and resembles silk grass; has a paleish, green, rough leaf, and bears a yellow berry as big as a small bean, with each berry lying close to the stalk above the leaf. The root is brown, branching out every way from the stalk. This root is one of the best our country affords, for all complaints of the breast or lungs, and is used in syrups, wine or spirits. It is a great strengthener of the system, and is good in dysenteries, diarrhœa, &c.

It is a stimulating astringent.

GINSENG.

95. It grows in beech and maple timbered land, in a rich moist soil, rising up one round smooth stalk, twelve or fourteen inches high; sending out two or three branches similar, in leaf and branch, to sassaparilla, and bears a red berry, and the root runs down into the ground like a carrot. This is a tonic medicine, bracing and strengthening, and taken in wine or spirits, as a cordial, is good against epidemic fevers, for pains in the breast, and and to cleanse filthy humors from the blood,

WATER FERN; OR, POLYPOD; OR, BOG ONION.

96. It grows in bog meadows and swampy places, on a great black bog or root. The stalk runs up with a row of leaves on each side of the stalk, long and jagged similar to the sweet fern. The root boiled in milk, is good for rickety children. Pounded and made into a poultice, and steeped in milk and applied, helps a breach or burst; and is used by steeping in cold water, in cases of asthma, phthisic, consumptive coughs, &c.

BUCK'S HORN BRAKE.

97. It grows similar to the other, though but two or three stalks in a bunch, with a small running jagged root, with pikes running out like the deer's horn. The leaves are of a dark green, and more smooth than the polypod. One kind of this grows on high wood lands, but their qualities nearly the same.

MOG BRAKE.

98. It grows on dry sandy land, rises up a strait smooth stalk two feet high, branching out into three branches, the leaves have a resemblance to the other brakes, and has a black slippery root. It is used in syrups in cases of consumption, and is of a cooling nature, and eases the pains of the gravel.

BONE SET; OR, THOROUGHWORT.

99. It grows in moist land, and rises up with a round hairy stalk three feet high, and has a whitish blow. The leaves are long and rough, two leaves coming out opposite to each other, and growing together around the stalk, with two little leaves just above them. This herb is emetic and cathartic; that is, it will puke and purge. It is good to open obstructions, cleanse the system, eradicate the bile from the stomach, and being taken in decoction, is an excellent guard against fevers.

RATTLE SNAKE'S PLANTAIN.

100. It grows almost every where in meadows, and resembles the common plantain, only the leaves are smaller and more notch-

ed upon the leaf, and the root is hot like pepper. This little plant is said to cure the bite of a rattle snake, by keeping the pounded leaves bound upon the bite.

RIVER WILLOW.

101. It is so generally known I shall not describe it. The bark of the root is used in an ointment for the salt rheum, and is good with other barks to cleanse away filthy humors from the blood.

BOX WOOD.

102. It is generally known where it grows, and that is in dryish land, where white oak, chesnut and walnut trees grow, and there you will be the most likely to find it. It has an oval leaf, and beareth a white flower somewhat smaller than a rose.

The leaves are hot, dry and binding, and it is said the leaves are excellent to cure horses that have the botts. The bark and flowers may be used to help diarrhœa and fluxes, and as stimulating astringents.

TO THE READER.

In closing this my first edition, I wish to enjoin on every purchaser the following rules:

First, That he denounce nothing contained here, till fairly tried, because they are simple vegetables, for I could procure hundreds of certificates in their favor if the work would contain them, but I omit them and also a preface, to give room for other matter:

Second, That they follow the directions and use the remedies here described, without resorting to any other joint means.

Third, That they keep this work within the limits of their own family, and lend to no one, as every person is able to buy and have one of his or her own.

Fourth, That they give each remedy a fair trial before they either quit it, or call other aid, (that is,) if they use the prescriptions at all.

Fifth, That they administer relief to any poor person that is sick, if such relief can be obtained in this work, without charge.

Sixth, That they do all in their power to promulgate the general reformation of medical science, that they may save their money, their constitution, and live to a good old age, and finally, that they adhere strictly to the directions in this work for bodily health and comfort, and by this means they may be able to slide gently along the channel of life, and live to be a comfort and support to their families, and be thankful that they ever saw the little book, entitled, the NORTH AMERICAN INDIAN DOCTOR.

AUTHOR.

INDEX.

Anatomy	3
Physiology,	42
Physic, practice of	47
Obstetrics,	64
Poisons.	72
Receipts,	77
Botanic Garden.	121

